THE

JOURNAL OF GAS LIGHTING,

WATER SUPPLY, & SANITARY IMPROVEMENT.

VOL. XV. No. 370—18th YEAR.] LONDON, DECEMBER 25, 1866. [Subscription { 15s. in Advance / 18s. Credit. } DOUBLE No. Price 1s.

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9746 cubic feet of gas per ton of coal.
36-candle gas.
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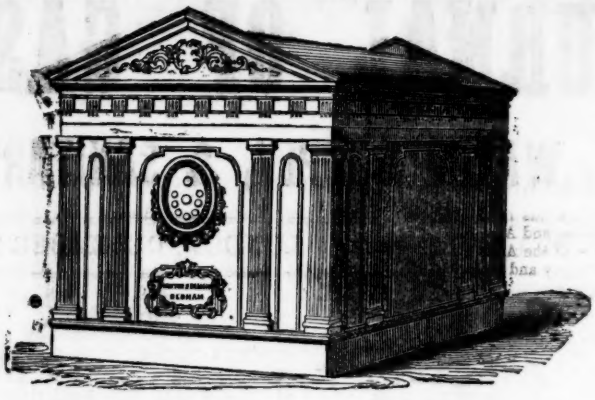

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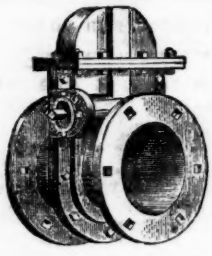

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☞ *See "Practical Mechanic's Journal," Dec.* 1, 1865; *also, p.* 711 "JOURNAL OF GAS LIGHTING," *Sept.* 18, 1866.

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ANOTHER

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THOMAS GLOVER has great pleasure in informing Gas Companies and his other Patrons, that the *Jury of Class XXXI. of the International Exhibition of* 1862 have awarded, for his Patent Dry Gas-Meter, *a Prize Medal.* The reason given for this Award, in the Juries Official Report, is, "*For excellence of manufacture, as regards Dry Meters.*" See Official Report, p. 346.

It is worthy of remark, that the only two other Firms who receive Awards *both manufacture imitations of Thomas Glover's* Patent Dry Gas-Meter, and the reason given for these Awards is "*construction* and sound workmanship." Thomas Glover, therefore, claims that the *construction* of his Meter has obtained *three Awards from the Jury of the International Exhibition of* 1862; at the same time, *contrasting* the Award granted for his Meter by the words, "*For excellence of manufacture, as regards Dry-Meters.*"

The Prize Meter was exhibited in Class XXXI., No. 6301, connected with a 1-foot holder, to demonstrate that a 50-light Meter *measures and indicates accurately the small quantity of One Foot.*

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TO CORRESPONDENTS.

No notice can be taken of anonymous communications. Whatever is intended for insertion, must be authenticated by the name and address of the writer; not necessarily for publication, but as a guarantee of good faith.

NOTICES.

Subscribers who have not paid their subscriptions for the year 1866, or for any previous years, are requested to remit the same forthwith in the manner indicated below, in order to prevent any interruption in the regular delivery of the JOURNAL; and such subscribers as desire to avail themselves of the reduction in the subscription by paying in advance, must do so in the course of the month of January.

The subscription is 15s. per annum, if paid in advance during the month of January, or 18s. credit, in two sums of 9s. each, in July and January of each year. Post-Office orders must be made payable at the Charing Cross Money-Order Office, to William H. Bennett, No. 42, Parliament Street, Westminster.

The next number will be published on Tuesday, January 8, and the subsequent numbers on each successive alternate Tuesday.

The Title-page and Index for 1866 will be issued with the next number.

This JOURNAL has been duly registered at the General Post Office for transmission abroad.

Stamped copies, when forwarded by post, must be folded so as to expose the stamp; they are otherwise liable to the full postage charge for letters.

All Communications to be addressed to the Editor, No. 42, Parliament Street, Westminster; and orders for Advertisements to the Publisher, Mr. W. B. King, No. 11, Bolt Court, Fleet Street.

THE JOURNAL OF GAS LIGHTING,
WATER SUPPLY, & SANITARY IMPROVEMENT.

TUESDAY, DECEMBER 25, 1866.

Notes upon Passing Events.

THE gas companies are much in the same position now as this country was in the time when M. Thiers was Prime Minister of France. Then it was the cue of French politicians of every grade, and of their many friends and imitators in other countries, to dilate day after day on the aims and ambitious designs of perfidious Albion. With such ingenious persistence was this scheme pursued, that it seemed likely, in the words of an eminent journalist, that "England's influence would be *lied* out "of Europe." So it is with the metropolitan gas companies. They began their operations when few people believed in gas; they carried them on for years under the deepest depression; they made London the best lighted and the safest city in Europe long before Paris had emerged from the gloom of rope-hung lanterns; they have reduced the price step by step, and would have done more had they not been taxed by perpetual local and parliamentary opposition. They are prepared to make further concessions from time to time, if they are only permitted to pay reasonable dividends to their shareholders. But nothing satisfies the unreasoning prejudices of the party who seem to have determined on the confiscation of gas property. We say confiscation, because the terms proposed mean nothing less. Here, for instance, is the report of the committee of the Metropolitan Board of Works on the supply of gas to the metropolis, which demands, in the event of the control of the gas supply being vested in the Board—

"1. That the maximum price of gas shall be fixed at "3s. 6d. per 1000 feet."

When it is remembered that the present price of 4s. is 6d. below that fixed so short a time since in a compromise after a serious parliamentary contest, this is one large step towards confiscation. To further reduce the price of all the companies, under all these varying conditions, is to reduce the dividends, and consequently the value of property purchased at premiums on the strength of the last compromise.

"2. That the illuminating power shall be increased— "to be equal to 18 sperm candles."

"3. That the gas be of such purity that it will not "discolour turmeric paper, or paper imbued with acetate "of lead, when such paper is exposed to a current of gas "issuing for one minute from an orifice a quarter of an "inch in diameter, at a pressure of not less than half an "inch of water. That the gas supplied do not contain "more than 16 grains of sulphur in any form in 100 "cubic feet of gas."

All these demands are, in effect, claims by the purchaser to settle the quality as well as the price of the article he requires. It is a revival of the laws for fixing the prices of corn and meat. On the same principle butchers might be required to sell the primest joints at 6d. per pound, and bakers a quartern loaf of fine flour for 2d. But this is not all. The committee ask "that in the event of the Government introducing a Bill into "Parliament for giving the Board authority to purchase the "properties of the gas companies, the amount to be paid "for such purpose should not in any case exceed a fixed "charge of 6 per cent. on the present paid-up ordinary capital "of the company, the holders of which are now in receipt of "10 per cent." Of course, where companies pay less than 6 per cent., they are to be docked in proportion. On what principle of justice 4 per cent. should be taken from the income of an investor, because his income is derived from gas and not from land or coal mines, it is difficult to understand. If the principle be sound, why not apply it to the extensions of metropolitan railways? Metropolitan railways are a great boon to the trade, the comfort, and the convenience of London; but a parliamentary committee would be rather astonished at promoters who proposed to fix the price of freehold property at a maximum of 19 years purchase, and the goodwill of trades at the same equally convenient sum for the purchaser. Paris is often praised by those visitors who never go off the Boulevards and two or three main streets, for its gas arrangements; yet in Paris one giant company has a monopoly of gas supply for a long term of years—a privilege for which a large sum is said to have been paid to a friend at court—with the right of charging 6s. 8d. per 1000 cubic feet to the general public. The London gas companies, whatever be their crimes, have at any rate proved to be squeezable. They do answer to the whip of public opinion, and every five or six years have been marked by some concession, in either price or convenience, to the wants of consumers. Without attributing to gas directors any supernatural patriotism or generosity, it is evident that, being always under parliamentary pressure, they must yield to a great extent to the demands of the public. What the case will be if the gas supply is vested in a municipal body, it is not difficult to prophesy. Either the whole

public will be taxed for the benefit of the gas consumers, or, what is more probable, according to endless precedents, the official gas producers will do exactly what they please, and set public opinion at defiance. What Local Boards of Works and Poor Law Guardians can do, we ought to know by our daily experience in the streets out of the City—where often, when two districts meet, two surveyors carry out different plans, and two Local Boards insist on wrangling—or in the reports of the proceedings in those workhouses and pauper schools where the indignation of public opinion is treated with contempt, and the order of superior authority is resisted to the uttermost. The people who are now clamouring for an official manufacturer of gas, surely forget the calm indifference with which all Municipal and Government Boards listen to complaints or protests. The Common Council of London is a fine example of this indifference. No Alderman, no Common Councilman, is ever admitted to be in the wrong until he has absolutely fallen within the meshes of the law. Pecuniary transactions of the most dubious character are the excuse for a burst of sympathizing indignation, a warm eulogium, or, perhaps, a testimonial to the dignitary whom all the rest of the world regards as next door to a cheat. An example of what a Common Councilman may do with impunity and without remonstrance from the purists and advanced Radicals sitting in the same chamber, has lately been presented in the business of the Metropolitan Markets. The chairman of the Metropolitan Markets, who is a publican in Newgate Market, has for some time been unpopular with the butchers and cattle salesmen, from the tyrannical and insolent manner in which he has exercised his "brief authority," and the way in which he has set in motion the letter of the law, in order to increase the revenues of the Corporation. The result has been a very pretty quarrel, in which, no doubt, some hard words have been applied to the zealous chairman. When the committee on the trade in animals was sitting, they called the chairman of the Metropolitan Markets Committee before them. In the course of his examination he expressed an opinion that there was organized collusion between the salesmen and butchers to report a lower price than the real price of meat sold wholesale, in order to defraud the owners of the beasts sent to market. Of course, it occurred to a member of the committee that *all* the trade could not be rogues, and that, in a business of such competition as that of butchers and salesmen, a universal conspiracy to cheat the producer would be difficult. So he inquired whether the grazier could not protect himself by changing his salesman? The publican chairman, no doubt taking the measure of the trades with which he was at war by his own honesty, replied, sharply, "That would be only "jumping from the frying-pan into the fire." When this summary slander of two large trades came to be published, there was, of course, a good deal of indignation. This was wildly exhibited by the butcher boys, who burned the obnoxious witness in effigy in the market on the 5th of November, and by butchers, who groan him down at charity dinners, where, in previous years, he had been accustomed to air his bar-parlour eloquence with great applause. But the cattle salesmen—a numerous and wealthy body—took a graver step, and presented a memorial to the Common Council, requesting an inquiry into the truth of the wholesale attack on the honesty of their trade. The application was met in a characteristic manner, no doubt arranged beforehand. The Newgate Market publican was asked whether he appeared before the House of Commons committee in his public or private capacity. He answered, without hesitation, in his private capacity —that is, he pretended that the parliamentary committee was anxious to hear the private opinions of a third-class publican on the cattle trade; forgetting, and feeling sure that his fellow Common Councilmen would forget, that the first question asked him was—"Are you chairman of the Metropolitan "Markets Committee?" and that a whole column of questions followed as to his duties and the information obtained in his official capacity. However, as all inquiry was to be smothered, the truth or untruth of the answer was a matter of no consequence. The representatives of a trade of ten millions sterling were curtly dismissed. Let gas consumers imagine what sort of consideration their representatives would receive from a committee presided over by such a person as the busy blatant individual who tyrannizes, with the silent assent of the Common Council, over the trades engaged in the meat supply of London.

We observe that that other municipal patriot, Mr. Dresser Rogers, sets more value on the art of portrait-painting than on science. It will be remembered that, full of zeal and virtue, he was so fierce in reproving Dr. Letheby for not giving evidence to his liking before the House of Commons Gas Committee, that he narrowly escaped being committed for breach of privilege—the House of Commons does not allow its witnesses to be threatened, even by Common Councilmen. Mr. Rudkin, a congenial soul, afterwards proposed to bring Dr. Letheby to a sense of his dependence on the City of London, and to caution him as to how he gave disagreeable evidence in future by making his engagement as analytical chemist to the Commission of Sewers terminable on three months notice. But municipal London saw quite another sight when the question was whether the Corporation should pay £1500 for a picture by an industrious and unknown artist, in which Mr. Dresser Rogers, in a costume to which he had no right, was the prominent person in a scene at which he was not present. It has often been a subject of remark and amusement to outsiders that when the citizens of London are supposed to give a banquet to illustrious strangers, in reality they magnificently entertain six hundred of themselves, wives, and connexions, and at most two hundred of non-City guests. But this picture job, to commemorate the presentation of the freedom of the City of London to the Prince of Wales, by hiding his Royal Highness behind the portraits of several score of Aldermen and Common Councilmen, failed, because £1500 was rather too much, and St. Thomas's Day was rather too near.

In the Agricultural Show week, at the annual meeting of the Royal Agricultural Society, the question of labour cropped up in a form that would have very much astonished an assembly of farmers in the same room twenty-five years ago. Then the question was how to employ labour—whether it was wise to encourage labour-saving machinery—whether cottagers wives could be taught to economize food and make a wholesome meal out of a little bacon, a little oatmeal, and a good many vegetables. Then the increasing weight of poor-rates was a perpetual scarecrow to landlords and tenants. Now the change is the other way. Agricultural labourers are not quite so valuable as mechanics, but employers are beginning to consider seriously how to obtain and retain good men. The suggestions made were more practical than usual on such occasions. One thing was quite evident—necessity will give what mere benevolence could never obtain. Take the first question of all—cottage accommodation. The alteration of the law of settlement has removed a great barrier to cottage building, and as labourers grow scarcer every year, it will soon be found as necessary to have cottages on an estate as barns and cattle-feeding sheds. In the time of our fathers a farm was complete with a cottage, a barn, an open yard, and a cart-horse shed. Now, landlords who desire tenants of capital are obliged to find good houses and very elaborate farm-buildings. In the future they will have also to build cottages of such a character as will satisfy labourers. The president of the Royal Agricultural Society, in his address, recommended that labourers should have each a cow's grass as well as garden. One of the following speakers, much leavened with a departing state of society, suggested that the cow's field should be a reward for industry and sobriety; another objected that a pig and poultry were sometimes a nuisance. These are foolish feeble wailings. When you engage a London butler of passable appearance, he makes his stipulations, and will not stay unless he can have his daily constitutional walk at the fashionable hour; he objects to many meals of cold meat, and is critical about the beer. The denizens of Tyburnia are obliged to submit to these and other conditions, because the well-trained butler is a valuable article. Our bucolic friends may make up their minds that the time is not distant when the agricultural labourer will be critical about the cottage and the garden, absolute on the question of the pig and poultry, and, if a superior man, prepared to insist on a cow's grass for the children's sake. And the sooner the better for all parties. The silly suggestion of co-operative farms by Lord George Manners was alluded to, and dismissed with the remark, that most farmers would willingly share profits over 10 per cent. if labourers would bear losses under 6 per cent.; but Mr. Pell, best known as an energetic agitator for the repeal of the malt-tax, mentioned that in an agricultural village in Warwickshire, notorious for its drunkenness and poverty, he had, on becoming owner of a neighbouring farm, established a co-operative store, and after a very few years "they were "doing a large business on a small capital; the savings of

" men who were said to have neither money nor pockets that " would hold it." At this store beer was sold, *not* to be drunk on the premises, in spite of the warnings of the clergyman, who now, however, confessed that the streets were quieter than before the store was established. There is a good deal in this arrangement about beer. It is true that in the North of England capital labourers do not expect beer, and work much better than those in the South who drink their gallon of cider or buttermilk; but wherever the population is beer-drinking, attempts to establish village reading-rooms or clubs, without beer and tobacco, are failures; and the same thing is true of working men's clubs in towns. To force temperance is a mistake, and if a club is to succeed it must afford the working man the same comforts he desires at home, and can obtain at the refreshment-rooms of the South Kensington Museum, for instance. The working men of London, with their wives and children, went in tens of thousands evening after evening for ten weeks to the concerts and *conversazioni* which, under the grand name of the " Metro- " politan and Provincial Working Men's Exhibition of Art and " Industry," were held in the autumn at the Agricultural Hall. The articles of art and manufacture were only enough to decorate the hall, the machinery in motion was insignificant; but the undertaking was a great and wholesome success, because the hard-working classes like to meet in gay crowds as well as their employers. There was something to look at, something to hear, plenty of room to walk and talk, no annoying regulations, and a glass of beer when they wanted it. No instance of drunkenness through drinking in the building occurred. This example of successful and innocent amusement on the let-alone plan should be studied by eager philanthropists.

It is reported that the Government have some intention of purchasing up the telegraph lines, and placing an amalgamated system in connexion with the Post-Office. As our Government can have no political object to serve, there is more to be said in favour of this scheme than most plans for adding to Government work. The drawback of our telegraphic system is that it will not pay to work it where it is often on emergencies most wanted—in remote rural districts, at night, and on Sundays. As we have a post-office in almost every village, where the postmaster or postmistress must be night and day, and as a postman is attached to every post-office, here is cheap machinery at once, and a means of adding to the income of a class of public servants not overpaid. It will be most convenient to have at every post-office in the kingdom the means of sending a swift message at a moderate rate in the daytime, and an important message at special rates by night, or on Sundays, when a telegram is often of more urgency than any other day, because the London post is closed.

We hear of, and hope to read, a report by a Monsieur Pontès on the pauperism of London and his comparisons with Paris. It seems that he makes out five times as many paupers in London as in Paris, and gives his theory of the causes of the disparity. If it be true, it is a gross reflection on our whole social system, and one which we cannot afford to leave alone. But we utterly discredit the fact. In France poverty is a question of police, and to apply for relief without solid reason is a punishable crime. The mere fact of looking needy authorizes any police-officer to arrest and question, and the slightest grounds enable a magistrate to convict and send to prison for *vagabondage*. The vagabonds and the destitute, genuine or feigned, have a very small area of lies at disposal. Each French workman is bound to carry with him papers showing where he was born, where he worked last, what trade, and with what character; he can be traced from one police district to another. In England, for nearly half a century, we had a system of poor-laws that actually created paupers—gave premiums for their production. We still leave the claimants for relief to the discretion of relieving-officers, without power to arrest or punish fraud. Every distressed person in this country has, *primâ facie*, a right to relief. Every person who receives medical relief through the poor-law officers is inscribed as a pauper. In France a large amount of relief is distributed by religious communities which here passes through relieving-officers; but that the French are, as a rule, more frugal and contented with cheaper food and clothes than English labourers, there can be no doubt. The subject is one which deserves examination by calm inquirers without a pre-arranged theory.

Circular to Gas Companies.

THE report of the committee of the Metropolitan Board of Works on the supply of gas to the metropolis, and on the proposed Government Bill on the subject, was presented at the meeting of the Board on the 14th inst., and was taken into consideration on Friday last. We insert elsewhere in our present number a full report of the proceedings. The reference to the committee was made in consequence of the President of the Board of Trade having requested to be informed of the opinion of the Board on each of the following courses proposed to be adopted in dealing with the supply of gas to the metropolis, viz.:—" The establishment of a " strict system of supervision and control of the manufac- " ture and supply of gas by the companies; or, the terms " on which authority should be given to the Board to " purchase the properties of the companies; so that, whichever " of those two courses the Government decided to adopt, " they might be acquainted beforehand with the views of " the Board, and the conditions on which they would be pre- " pared to accept the duty to be cast upon them." The recommendations of the committee on each of those courses of proceeding seem to have been framed to carry out, in the strongest manner against the gas companies, the different heads of the proposed Government Bill. Should the first of the alternatives be adopted, the committee recommend that a chemical board be appointed by the Board of Works, to be paid by the gas companies, to analyze the gas; and that a public auditor be appointed by the Metropolitan Board to examine the accounts of the gas companies, independently of their own auditors. In the event of the adoption of the other alternative—the purchasing of the properties of the companies—the committee make a more barefaced proposition for the confiscation of property invested on the faith of Parliament than was ever made by a public Board to any Government. We pass over for the present the proposition that the companies should be compelled to supply 18-candle gas for 3s. 6d. per 1000 feet, and to reduce the quantity of sulphur below the amount yet found practicable except under peculiar conditions, as we have on several former occasions adverted to the difficulty of maintaining such a standard of illuminating power when the natural stores of cannel are being rapidly exhausted, and the price is still more rapidly increasing. The monstrosity of the proposed confiscation of 40 per cent. of the income of the holders of gas shares throws into shade the proposed amendments of the Metropolis Gas Act, though they would, in fact, in a more indirect manner, so far diminish the value of gas property as to amount to some extent to a confiscation of property protected by special and by general Acts of Parliament. The committee of the Board of Works, it will be observed, make a profession of regarding the vested interests of the companies by proposing that their properties should be purchased, and not appropriated without compensation; and the pretext for offering only 6 per cent., instead of the 10 per cent. the shareholders now receive, is " the uncertain nature of " their present security as compared with the security of the " bonds offered by the Board." It is true that some insecurity does attach to gas property, of which several incidents to which we shall shortly allude are examples; but when the Legislature, by the Gas-Works Clauses Act of 1847, permitted the holders of gas shares to divide 10 per cent., with back dividends, they took the insecurity arising from such causes into consideration. The actual price of the shares, compared with other property, may be taken as the estimate formed by practical men of the probable extent of such risks. The committee admit that the present market value of gas shares averages from 30 to 40 per cent. premium, with all the insecurity that attaches to them—though, in fact, the premiums range from 40 to 50 per cent., and even 50 to 60 per cent. previous to the commencement of the present agitation and the recent pressure in the money market—nevertheless, they would endeavour to compel the holders of such shares to part with them for bonds bearing only 6 per cent. interest. There is now, indeed, a kind of insecurity in gas property that the Legislature in 1847 could scarcely have contemplated. It could not have been thought possible that a body of men, elected by the vestries to represent the ratepayers of the metropolis, and authorized to exercise extensive administrative powers in this great commercial community, would have proposed to the Government to compel the gas companies to part with their property for much less than it is worth. We

cannot believe that the Government will listen to so unjust a proposition, nor that they will—having the purchase of the gas-works in contemplation—attempt to make such sweeping alterations in the Metropolis Gas Act as would deteriorate the property they intend afterwards to buy. It would be the same as if they were to intend to purchase the whole landed property of Ireland, and cultivate it for the public advantage, and previously to impose a heavy land-tax to diminish its value. In the rage for centralization such a project would not be wanting in supporters, nor would arguments be wanting to show how greatly the public would be benefited by it. The production of food, it might be said, is far more important than the manufacture of gas, and is it fitting that a nation should be dependent for its existence on private enterprise? Landowners would find it difficult to make out so good a case for keeping their estates as the gas companies can for holding their property, which has been confirmed to them by numerous Acts of Parliament, both private and public; and the supposed device of taxing the land first, to diminish the value, and then compelling a sale at 40 per cent. below the rental, would enable the Government to produce and supply food with great advantage to the public. Such wholesale plunder would not be greater injustice, if so great, in one case as in the other, and all holders of property are interested in opposing the proposed project of robbing the gas companies to benefit the public.

The discussion by the Board of the committee's report occupied nearly two hours. An amendment was moved to the effect that the maximum price of 18-candle gas should be 3s. per 1000 feet, instead of 3s. 6d., but into that lower depth the majority of the members were not inclined to fall, only a few hands having been held up in its favour. Another amendment, of which notice had been given, to limit the dividend on any new capital created by the gas companies to 5 per cent., was not brought forward; and a third, proposed by a member who defended the companies, for referring the report back to the committee, found no seconder. It was suggested, though not moved as a formal amendment, that in case the gas-works should be placed under the management of the Metropolitan Board, there should be no maximum price of gas, and no standard of illuminating power; and another member recommended that the gas companies should be made to pay £100,000 annually to the Board of Works for carrying on the improvements of the metropolis. Finally, the motion that the report be agreed to was carried by a large majority.

The long looked-for report of Mr. Hawksley, on the practicability of removing sulphur compounds from coal gas, was presented to the City Court of Sewers on the 11th inst., and will be read with much interest. The results of his elaborate experiments have led him to the conclusion that it is practicable, at the expense of 1d. per 1000 feet of gas, to reduce the amount of sulphur to the minimum of 12 grains per 100 cubic feet, and to the maximum of 16 grains. He proposes to effect that amount of purification by the combined use of oxide of iron, lime, and ammoniacal liquor. One remarkable result he has arrived at is, that the varieties of coal which abound in iron pyrites do not yield a larger proportion of bisulphide of carbon then other kinds of coal, and he conceives that that peculiar sulphur compound is probably a combination of sulphur and organic matter naturally existing in all coal in a non-apparent form. This opinion is opposed to experience at the gas-works in the metropolis, where the plan of picking out the iron pyrites has been found of great service in diminishing the quantity of sulphur in the gas. Mr. Hawksley suggests no method of avoiding the nuisance which lime purification occasions, and which was the cause of abandoning it in populous neighbourhoods. It is questionable, therefore, whether the process he recommends could be adopted in large towns, even admitting its efficacy. The experiment might be tried with advantage at the works of the Great Central Company at Bow Common, to ascertain whether gas from Newcastle coal could be purified so completely as in Mr. Hawksley's experiments, in which, we believe, inland coals only were employed.

The recent decisions in the law courts respecting the liabilities of gas companies under Lord Campbell's Act show the necessity of greater caution than has hitherto been practised by managers of gas-works in supervising the conduct of the men in their employ. In our last number was reported the proceedings in the case of *Robinson v. the Imperial Gaslight Company*, which resulted in a verdict for the plaintiff with £75 damages, in consequence of a trench opened for laying a pipe having been loosely filled in, and left in so insecure a state that a horse drawing a gig fell into it, and broke its knees. We insert in our present issue the report of a nearly similar case, *Coram v. Anderson and another*, for injury sustained by the wife of the superintendent of the police at Dover, in consequence of falling over an imperfectly repaired trench, in which case the damages were assessed by consent at £125. Another, and by far the most important, precedent is the result of the new trial granted in the case of *Ward v. the Chartered Company*, for damages caused by the fire which destroyed Saville House, in Leicester Square. After having occupied the Court of Exchequer for three days, the jury, on Thursday last, set aside the nonsuit, and gave a verdict against the company; the amount of damages being referred. Want of space compels us to defer the publication of the report, but the facts proved in evidence on the first trial were not materially altered. They were briefly these: The gas company, having suspected that a larger quantity of gas was consumed by one of the occupants of Saville House than was accounted for, removed the meter, intending to replace it by another one. The meter was taken away, with the knowledge of the occupier, named Bloom, and his servants, and the supply of gas to a billiard-room was thus temporarily cut off. It was admitted that the inlet-pipe was closed, and that no gas escaped when the men employed by the company left the premises. During their absence some of Bloom's servants endeavoured to light the chandelier, and, finding they could not do so, they turned the cock and let the gas flow from the open pipe. The escaping gas produced a noise, and one of the men took a lighted candle to see whence it proceeded, and an explosion occurred which set fire to, and destroyed the building. The only point of difference regarding the facts was that the gas-fitters asserted that they not only turned off the gas, but that they took away the key, and plugged up the orifice of the pipe, which was denied by the servants of the plaintiffs. The Chief Baron Pollock, before whom the case was originally tried, pronounced a decided opinion that the accident had not been caused by negligence of the gas-fitters, but by the servants of Bloom. If there had been negligence by the former, he said it had only contributed to the accident, and had not caused it, and on that ground he nonsuited the plaintiff, as the cause of the action had not been correctly stated. The new trial was granted on the allegation of the counsel for the plaintiff that there was further evidence to prove that the gas-fitters had not taken sufficient precautions, if the case had not been stopped. The Lord Chief Baron Kelly, before whom the case was again tried on Thursday, said the simple question was whether the fire was occasioned by the negligence of the defendants servants, and the jury, with the usual leaning against public companies, gave a verdict for the plaintiff. This case, and that of the Wood Street catastrophe, are examples of the perils to which the distribution of gas is liable, and show the necessity of having in every case an external tap to which only the officers of the gas company and the firemen should have free access. The damages and costs of the Saville House case will probably absorb a whole year's profits of the Chartered Company, and will effectually prevent them from making any further reduction in the price of gas for some time to come. The old proverb says, however, that "it is an ill wind that blows nobody any good," and to the Metropolitan Board of Works the verdict against the Chartered Company will be a godsend, in confirmation of their opinion that the uncertain nature of the security of gas property renders 6 per cent. bonds of the board equivalent to 10 per cent. dividends on gas shares. But, as we have before observed, the market price of the two kinds of property is the best test of their value, and it would require many more disastrous explosions, with accompanying adverse verdicts in law courts, to bring gas property to the low estimate at which the Board desire to make it compulsory on the companies to sell.

The awards of the arbitrators as to the price to be paid by the Alliance Gas Company to the United General Gas Company for their works in Dublin and the neighbourhood has been made and published, and by it the minimum sum of £240,000 is, by the consent of the parties, to be paid for the works, and £26,511 for the unapplied stock and book debts. This is equivalent to a fraction more than £29 10s. per share in the United General Company, the present market price of which stands quoted at from £28 to £29; but as the company receive payment of £135,000 in shares of the Alliance Com-

pany at par, which are quoted at a respectable premium, and are still proprietors of the Limerick works, which are valued at £30,000, they have made a tolerably good bargain by the sale of their Dublin property.

Mr. Arntz, the surveyor to the Board of Works for the Westminster district, has just made a report on matters relating to the management of public works in Paris, in which the conditions of the supply of gas, and the regulations for its distribution, are particularly noticed. In remarking on the concession to the existing gas company, he mentions as one of the terms of the concession that the gas shall be "perfectly purified;" and he says that in the mode of ascertaining its purity there does not seem to be any test against the presence of ammonia, nor of sulphur, otherwise than in the form of sulphuretted hydrogen. The part of his report, however, of most importance at the present time is that in which he states that in the sewers of Paris "gas-mains are carefully excluded." We commend this portion of the report to the special notice of the Metropolitan Board.

Register of New Patents.

1382.—Walter Payton, of 70, Sewardstone Road, Victoria Park, in the co. of Middlesex, for "*Improvements in the construction of dry gas-meters, part of which improvements is also applicable to meters for measuring water and other liquids.*" Patent dated May 15, 1866.

These improvements relate to that class of dry gas-meters the cases of which are formed chiefly of cast iron, and the object of the improvements is to obtain simplicity of construction in such meters, with facilities of access to the parts thereof in case of need. For this purpose the body of the meter is formed in two parts, each part having one solid face and an open end. The open ends of the two parts are united by a screw and flange joint. Each joint is also the means of holding correctly in position the central partition forming the division or separation between the two compartments containing the diaphragms. This partition is also formed with a flange or flanges to receive a packing. Each part of the body of the meter is also formed with a rim projecting inwards, to receive and hold, by set screws or otherwise, an outer rim, carrying the stationary portion of one of the flexible partitions, so that such partitions may be readily removed and replaced on the separation of the parts of the body of the meter. Each of these projecting rims is also formed to contain a gas-way leading to its interior when its diaphragm is in position. There is also applied to each of the axes, which by arms are connected to the moveable diaphragms, and by other arms are connected to the valves, conical, or other shaped projections, to fit into corresponding conical or other shaped seats, to which they are held by spring or weight pressure, so as to render stuffed packing unnecessary. This substitution for stuffing-box arrangements is also applicable to other cases of dry gas-meters, and to cases of meters for measuring water and other liquids. The valve-seats, and the passages thereto, are formed of white metal or composition, with a tin or white metal cover to the passages thereof, so as to close the same by soldering; and the flanges to these parts are formed so as to fit into recesses formed for them in and facilitate ready connexion with the cast-iron parts of the meter.

1384.—George Haseltine, of 8, Southampton Buildings, Chancery Lane, in the co. of Middlesex, civil engineer, for "*Improvements in the mode of and means for promoting ventilation.*" A communication. Patent dated May 15, 1866.

This invention is not described apart from the drawings attached to the specification.

1401.—Julian Bernard, of 47, Lincoln's Inn Fields, London, but at present residing at 50, George Square, Glasgow, in the co. of Lanark, N.B., gentleman, for "*Improvements in motive-power engines, parts of which are specially adapted for raising and forcing water, and for other mining purposes.*" Provisional protection only obtained. Dated May 17, 1866.

This invention consists in the application of compressed air in combination with a liquid or liquids, by which the main working parts are lubricated and kept tight, for actuating engines used for the raising or forcing of water from mines, and for performing other operations where the application of power is required.

Under one modification an engine is situated in any convenient part of the mine, and its cylinder is constructed with chambers at one or both ends, containing water or other fluid. These chambers directly open into the cylinder, and both sides of the piston working therein are exposed and covered by the liquid passing thereto from the chambers. Compressed air is the motive agent employed, and the chambers are provided with valves of any suitable construction for its admission or exhaust. The pumps may be worked direct from the piston-rod or other reciprocating parts of the engine.

Under another modification, in place of using a separate cylinder for actuating the pump or pumps, these are rendered capable by special arrangement of being used as motive-power cylinders.

According to one method of arranging such pumps, one or more are situated beneath a lever or segment, and their plungers or pistons are connected by chains or otherwise to the opposite ends of the lever or segment. Valves are applied to the pump-barrel to admit air to one side of the plunger attached to one end of the lever or segment. The air causes the plunger to descend, and at the same time raises that or those on the opposite side, filling the barrel or barrels with water, whilst the water in the barrels in which the plunger or piston has been depressed is expelled. The air is thus alternately admitted to one side of the piston or plunger by means of valves actuated by the motion of the piston or plunger in each barrel, and thus the pumps themselves, without being coupled to another engine, are rendered capable of performing operations where the application of power is required.

1402.—John Beale, of East Greenwich, in the co. of Kent, engineer, for "*An improved rotary engine to be used for pumping fluids or gases or as a motive power.*" Patent dated May 17, 1866.

This invention of improved rotary engine, to be used for pumping fluids or gases, or as a motive power, consists in the combination of sliding pistons and revolving rings, of the construction and in the manner hereinafter described.

The engine is composed of an outer casing, or cylinder, furnished with an inlet and outlet, as usual. Within this outer casing is fitted a revolving drum, the axle of which passes through a stuffing-box at each end, or at one end only, and is carried on anti-friction rollers, or otherwise. This revolving drum is mounted so as to be eccentric in relation to the outer casing of the cylinder, and is slotted to allow two pistons, or partitions (connected so as to act as one), to slide in the drum in such a manner that the outer ends of the pistons, or partitions, may be always kept in contact with the interior of the stationary casing or cylinder. One of the pistons, or partitions, is larger than the other, the smaller piston being inserted in a slot formed at one end of the larger piston. By this connexion of the two pistons respectively the smaller becomes an elongation of the larger, and they together constitute one piston, or partition, extending across the whole interior of the stationary case or cylinder. The larger piston is connected at one end, by means of pins, with rings capable of revolving in annular grooves formed in the end plates of the stationary case or cylinder, and the smaller piston (at the reverse end of the larger) is similarly connected with guide-blocks, which work within curvilinear grooves or slots in the said rings.

By the foregoing arrangement of the parts, on the revolution of the axle the drum carries round the sliding pistons, the end or edge of the larger piston being kept in contact with the interior of the stationary case, or cylinder, by the pins fitting into eyes in the concentric rings, and the end or edge of the smaller piston being kept in contact with the said interior by the sliding guide-blocks working in the curvilinear grooves or slots formed in the rings.

The engine may be worked either as a pump or exhauster, as above described, by applying motive power to the axle, or as a prime mover by the pressure of steam or other fluid on the pistons, such steam or other fluid being admitted and allowed to escape in the usual way. The parts may be packed, and the ordinary reversing slide fitted as usual.

1410.—Julian Bernard, of 47, Lincoln's Inn Fields, London, but at present residing at 50, George Square, Glasgow, in the co. of Lanark, N.B., gentleman, for "*Certain improvements in generating and heating steam, gas, and vapours, and in the machinery or apparatus employed therefor.*" Patent dated May 18, 1866.

This invention consists of three principal heads—firstly, it relates to the impregnation or charging certain suitable materials, such as felted or woven fabrics, with water or other fluids suitable for the production of steam, vapour, or gas, and to the disposing of such materials in suitable steam, vapour, or gas generators; secondly, it relates to an improved steam-boiler, generator, or superheater, but which is more especially adapted to the production of steam or vapour, when the water or fluid from which such steam or vapour is produced is evaporated in the manner hereinafter described; and thirdly, it relates to an improved method and means of supplying heat to boilers or generators.

In carrying this invention into practice a generator is made, consisting of a series of compartments, which may be either of circular, rectangular, or other convenient form. The compartments under one modification are constructed with their upper and lower alternate ends closed, so that a series of either concentric, or parallel, or uniform chambers or cells are thereby produced. In each cell which has its upper end open, a circular framing is suspended from a ring or rings, bars, or other means of support, which rest on or are fixed to the edges or sides of the upper part of the chamber or cell; and secured into or around the framing or support is a layer or layers of some largely absorbent material, such as rough canvas, felt, or other fabric capable of holding considerable quantities of water in suspension. The upper part of each frame is provided with a gutter or tube, into which water is continually admitted in such quantities as may be required, and the upper part of the absorbent material is connected to the tube or gutter, thereby obtaining or receiving a continual supply of water. Heat is applied to the cells or chambers whose openings are on the lower side or ends of the generator, and the heat is thus very rapidly conducted through the plates forming the sides of each cell to the absorbent material containing the suspended water or other fluid. The water is by this means speedily driven off into steam, and as the evaporation continues more water is supplied in the manner hereinbefore described. It is preferred to apply atmospheric air in a highly rarefied and heated condition for the purpose of generating the steam in lieu of applying the heat directly, which heated air may be forced into the generators or heaters by means of a fan, blowing cylinder, or otherwise.

It is to be understood that a vessel similar to the foregoing may be used for the superheating of steam, gases, and vapours, as well as for effecting other objects where the application of heat is required.

1419.—Henry Wilson, of Stockton-upon-Tees, in the co. of Durham, for "*Improvements in cocks or taps for the attachment of pipes with soldered or plumber's joints.*" Provisional protection only obtained. Dated May 19, 1866.

This invention consists in forming loose bosses or nuts with a right and left-hand screw internally for attachment to the cock or tap. Where a pipe is attached to each end of the cock or tap, one end of the said cock or tap is screwed externally with a right-hand screw, and the other end with a left-hand screw, the bosses or nuts being screwed internally in a similar manner. On the outer ends of the loose bosses or nuts the pipes are soldered. The bosses or nuts are then fixed in a line at the proper distance apart. The cock is placed between them, and by turning it in one direction it is screwed into both the bosses or nuts at one and the same time. Where only one pipe is attached only one boss or nut is made use of, to which the pipe is soldered. The application of heat to

the barrel of the cock or tap is entirely dispensed with in the operation of soldering at the joints of the pipes, which, under the old system, strained the barrels of the cocks or taps so that the plugs never fitted uniformly, consequently were always leaking.

1451.—Sholto Douglas, of Blairgowrie, in the co. of Perth, N.B., for "*Improvements in motive-power engines, and in the mode of applying water, steam, compressed air, and other liquids and gases for driving the same.*" Patent dated May 23, 1866.

This invention has for its essential object a certain peculiar arrangement of machinery or apparatus, to be actuated by steam, water, compressed air, or other liquids or gases. A wheel or wheels is or are carried on an axle or axles, which rotate in water, air, or steam-tight bearings fixed in the sides of a cylinder or case. The case is so constructed that the wheel revolves freely within it, and in such a manner that as little wear as possible may result from the movement of the wheel therein. On the circumference or in the body of the wheel several curved passages are made. These passages are so formed that the water, steam, compressed air, or gas entering therein leaves the passages by escaping therefrom to the same direction or approaching to the same point of the wheel that it entered; that is to say, the passages are bent into a curved figure, and by the resistance opposed to the passage of the water, steam, compressed air, or gas, as it issues from the return end of the passages, additional power is obtained over and above what would be due to the pressure of the column of water, steam, compressed air, or other fluid under ordinary circumstances. It is to be understood that the number of such passages employed may be varied to suit any particular circumstances.

1468.—Ernst Büchner, of Frankfort-on-the-Maine, Germany, for "*Improvements in the manufacture of gas.*" Provisional protection only obtained. Dated May 25, 1866.

For the purpose of this invention the furnace by which the gas-retorts are heated is heated by burning therein gas tar and ammonia water. Any suitable arrangement or construction of furnace may be employed, and separate from the combined use of gas tar and ammonia water as fuel. No claim is made to the construction of furnaces.

The furnace is filled in the first instance with a little wood or other fuel once for all, and set on fire, and then the taps of the pipes leading from the tar and ammonia tanks are opened, and these liquids flow slowly into the furnaces. By this means a greater yield of gas is obtained, and the operation is conducted more expeditiously than heretofore, while at the same time waste products are usefully applied. The heating also is more economical than with coke, and the retorts last longer, because they are not cooled by opening the furnace.

1470.—Baldwin Fulford Weatherdon, of 77, Chancery Lane, in the co. of Middlesex, civil engineer and patent agent, for "*Improvements in gas pyrometers, which may also be employed as thermometers.*" A communication. Patent dated May 26, 1866.

This invention has for its object the employment of the variation of volume developed in gaseous or other bodies resulting from the various temperatures of the matter in which the said body is placed, whereby physical and mechanical effects are produced calculated to maintain an equal temperature in the said matter. The invention consists in the employment of a mercury thermometer, gas pyrometer, or otherwise, having two branches or tubes springing vertically from the bulb, in each of which said tubes platinum wires, surmounted with silk thread or other insulating matter, are so arranged in connexion with electric piles and magnetic coils, moving in conjunction with supply and discharge water tubes, valves, air-passages, or otherwise as to admit of the said regulation being uniformly and accurately maintained.

1475.—David Thomson, of Old Street, St. Luke's, in the co. of Middlesex, and William Porter, of Manor Park, Lee, in the co. of Kent, for "*Improvements in machinery used in raising and forcing water and other fluids.*" Patent dated May 26, 1866.

For this purpose, in constructing a chain-pump the chain is formed in the following manner:—The links are alternately composed of plates on edge and plates on the flat. The inner edges of the plates on edge are curved to correspond with the surfaces of the upper barrel, which give motion to the chain. At intervals in the chains pistons are introduced, which are each composed of a plate or plates corresponding in form with the transverse section of the trunk or pipe through which they pass in raising water or other fluid. The plate or plates composing each piston is attached to the links of the chain in any convenient manner; but it is preferred to use two straps or plates bent in the middle, so as to receive the piece of the contiguous links, the straps or plates being of like width with the horizontal links of the chain. Each horizontal link has fixed to, or formed on it, an internal projection, and the upper barrel of the chain of pistons is formed with projections at intervals, which enter between the plates on edge forming the alternate links of the chain, and they enter between the ends of the plates which form the horizontal links of the chain. The pistons are received in recesses formed in the upper barrel, and such is the case in respect to the internal projections of the horizontal or flat links. The lower barrel, under which the chain passes, is plain or cylindrical, and the internal projections on the inner surfaces of the flat links come against the same.

In constructing valves or pumps used when forcing or raising water or other fluid, each passage or opening is covered with vulcanized india-rubber, or other suitable flexible material, of such dimensions as to overlap the opening or passage; and such india-rubber or flexible material is attached to the valve, so as to be raised or lowered therewith. The valve, on the surface next the passage or opening, is rounded or bevelled, and such surface of the valve more nearly corresponds with the dimensions of the opening or passage. The water or other fluid, when passing through the passage or opening, bends the india-rubber or other flexible material against the rounded or bevelled surface of the valve, whilst the valve is supported, when closed at a distance from the opening or passage, and at a point or points beyond the edges of the india-rubber or other flexible material, in such a manner as not to press the india-rubber or other flexible material between it and the side of the valve.

1488.—David Duff, of Litchfield Street, Soho, in the co. of Middlesex, gas engineer, for "*Improvements in gas-regulators applicable to burners and meters.*" Provisional protection only obtained. Dated May 28, 1866.

This invention relates to improvements in the construction of gas-regulators applicable to burners or meters, whereby a steady light is produced and a great economy in the consumption of gas is effected, in addition to which advantages, a means is afforded of preventing the accidental escape of gas from the burners.

With regard to the means of regulating the supply or flow of gas through the burners, it is proposed to form on the internal periphery or tube of the lower portion of the burner a female screw-thread, into which a male screw is made to gear. The female screw is formed with a milled-edge button or disc on its upper surface, surmounted by a tightening screw. The male screw has a wedge-shaped cavity cut out, the apex of which is nearest the upper surface of the metal, and it therefore follows that, as the male screw is raised or lowered in the tube, the conical or wedge-formed recess will present a greater or less open area for the passage or flow of gas from the pipe through the burner. Thus it is always easy to regulate the supply by the adjustment of the screw-valve. Should it be deemed necessary to stop the supply of gas to the burner altogether, it is only necessary to remove the upper portion of the burner, and to screw down the valve so that the rim or border of the disc shall press tightly on the upper flange or surface of the lower chamber of the burner, whereby the passage becomes completely closed; and if the tap of the burner is turned open, no gas can escape, and therefore all chance of accidental explosion will be avoided.

With regard to the regulators for meters, it is proposed to form a casing or chamber of any suitable form, but by preference of a circular form. One end of this chamber receives the supply-pipe, the top of which is provided with a flange or seat, the inner periphery of which is made to fit the arc of a sphere or to be of a curvilinear or dish shape, in order to receive a corresponding valve, which shall fit such recess or seat. This valve is also provided with a flange or rim, so as to register with the surface of the supply-pipe. Above this valve, and pressing thereon, is placed a tapering and helical spring, of very thin metal, the upper portion of the spring bearing against the lower surface of a tubular spindle or rod, having a male screw cut thereon, this rod being enlarged by a recess head at the lower extremity, into which recess the top of the helical screw enters. This screw tubular spindle works in a stopper or plug, which in its turn works in the female thread of the upper or outlet gas-pipe, so that both these screws can be regulated not only in regard to each other, but also in regard to the lower valve. The stopper or plug being cut with a wedge-shaped cavity whose apex is lowest, it follows that its elevation or depression will permit of the escape of gas in a greater or less quantity as may be desired. Should the pressure of the gas be very great, the lower floating or rising and falling valve will close entirely upon the surface of the lower flange of the screw-plug, and stop one source of escape, leaving only that by the screw arrangement. This regulator may be placed in any convenient position, vertical, horizontal, or otherwise, its action being the same in all cases.

1516.—Edward Taylor Bellhouse and William John Dorning, both of Manchester, in the co. of Lancaster, engineers, for "*Certain improvements in hydraulic pumps and valves connected therewith, and also in the method of driving or actuating such pumps.*" Patent dated May 31, 1866.

This invention consists in arranging and constructing hydraulic pumps, their cisterns, and other apparatus, in such a manner that the suction-pipes may be removed and replaced without removing the cistern-cover, or necessarily disturbing other parts of the apparatus. Also in the adaptation and application of an air-valve to admit air to the pumps instead of water after a given pressure is attained. Also in the employment and use of a support or supports for the large toothed driving-wheels of hydraulic pumps, to receive and sustain the weight thereof when not revolving.

1522—John Henry Johnson, of 47, Lincoln's Inn Fields, in the co. of Middlesex, gentleman, for "*Improvements in the deodorizing of crude rock or mineral oil, and in the preparation of lubricating oil therefrom.*" A communication. Patent dated May 31, 1866.

This invention consists in first reducing the crude oil by evaporation, by the application of steam or other heat directly to the boiler containing the oil, until the required specific gravity is obtained, which will vary with the different descriptions of oil operated upon. To this concentrated oil are added common salt or chloride of sodium, lime, nitrate of potash, or nitrate of soda, potash or soda, in any suitable proportions, according to the amount of sulphur or impurities contained in the oil; but in practice the following proportions to one gallon of treated oil have been found in most cases to give a good result:—

Common salt or chloride of sodium. .	5 ounces.
Lime	5 "
Nitrate of potash or nitrate of soda .	1½ "
Potash or soda	½ "

The oil, with these ingredients added thereto, is then to be submitted to the action of heat until it attains the desired consistency or specific gravity for lubricating purposes, when it will be found to be thoroughly deodorized and cleansed from all impurities.

1525.—Henry Edward Newton, of 66, Chancery Lane, in the co. of Middlesex, mechanical draughtsman, for "*Improvements in the construction of water-cocks or hydrants.*" A communication. Patent dated May 31, 1866.

The object of this invention is to construct water-cocks or hydrants in a very simple and economical manner, and to work the valves in

such a way that the several working parts shall not be so liable to derangement as the valves and other working parts of water-cocks and hydrants as now made. To this end the box or casing of the cock or hydrant is made of cast iron in one or two pieces, which are connected together by bolts. The valve is by preference of a circular form, and is made with an india-rubber or leather packing, which fits against a ground seat. The valve is secured to the lower end of a long stem or vertical rod, which passes through a stuffing-box, so as to form a perfectly water-tight packing, and extends from the hydrant or cock, which is enclosed in a chamber below the ground, up to the level of the ground above. In order to admit of the action of the valve being adjusted to any desired extent, the valve-stem is made in two parts, which are to be connected together by a screw, union, or other equivalent mechanical device, so that the length of the stem may be regulated at pleasure. To the upper end of the valve-stem is adapted a hand-lever, whereby it may be raised or lowered for the purpose of opening or closing the face-valve at the lower end of the stem. To facilitate the action of the parts, and in order to keep the valve down on its seat when not required to be maintained in an open position, a weighted lever or levers is or are adapted to the upper end of the stem of the valve, to act as a counter-balance. In order to open the valve, it may be made either to rise from its seat or to fall from its seat, according to the mode of constructing the upper parts of the cock or hydrant; but, under all circumstances, the valve, when shut, will be kept in place by the counter-balance or weighted lever or levers. Instead of a hand-lever for working the valve, a pedal-lever or treddle may be used, or the stem may be moved up and down by a cord, chain, or rod, if the cock or hydrant be inconveniently placed for working direct with a hand-lever. Any convenient number of orifices may be made in the exit-pipe or chamber to receive a corresponding number of nozzles or jet pieces, and, if required, filtering diaphragms or screens may be placed inside the casing to prevent extraneous matters from obtaining access to the valve-chamber and stopping up the valve opening, or otherwise deranging the apparatus. Suitable openings must, of course, be made in the sides of the casing in order to obtain access to the filtering diaphragms or screens, so as to clean the same when required.

The supply of water to towns, from canals or aqueducts, is generally effected by means of hydrants which can be turned on at pleasure. These hydrants offer the advantage of only giving out the quantity of water required at the moment, which is very important, especially in times of drought. The inconveniences attending the apparatus hitherto employed arise more especially from the rapid wear of the springs or boxes of the cocks intended to open and close the water-ways, and also the difficulty which is experienced in working a box cock of large diameter. Moreover, during winter the freezing of the liquid contained in the pipe often causes it to burst, and the water in escaping causes damage which it is found expensive to repair. These evils are obviated, according to the present invention, by sinking into the ground a pipe or water-box cast in two pieces, and which is intended to receive a valve furnished with a conducting-rod acted upon by a double counter-weight lever, which closes the valve upon its seat in a vertical direction. The arrangement of these levers is such that their wear is inappreciable even after having been in use for several years, and does not affect the working of the apparatus.

APPLICATIONS FOR LETTERS PATENT.

3226.—Alexander Colvin Fraser, of Colchester, in the co. of Essex, for "*Improvements in apparatus used in the manufacture of gas.*" Dec. 7, 1866.

3242.—William Warren, of Alstone, near Cheltenham, in the co. of Gloucester, machinist and engineer, for "*Improvements in pumps.*" Dec. 8, 1866.

3258.—Edmund Small Cathels, gas engineer, of Lower Sydenham, in the co. of Kent, for "*Improvements in apparatus for conveying and regulating the supply of gas.*" Dec. 11, 1866.

3275.—James Talbot Kent, of Norden Corfe Castle, in the co. of Dorset, for "*Improvements in taps or cocks for drawing off liquids.*" Dec. 13, 1866.

3296.—Thomas Hoey, of Glasgow, in the co. of Lanark, N.B., engineer, for "*Improvements in arrangements and apparatus for measuring and controlling the supply of water for closets and general uses, and for the deodorization, removal, and utilization of excrementary matters.*" Dec. 15, 1866.

3300.—Edward Meldrum, of Bathgate, in the co. of Linlithgow, N.B., esquire, for "*Improvements in the manufacture of gas for illuminating and heating purposes.*" Dec. 15, 1866.

3308.—William Clark, of 53, Chancery Lane, in the co. of Middlesex, engineer and patent agent, for "*Improvements in carburetters.*" A communication. Dec. 15, 1866.

3332.—Samuel Buxton, of Hunslet, in the co. of York, contractor, for "*An improved stench-trap.*" Dec. 19, 1866.

3336.—Michael Henry, of 68, Fleet Street, in the City of London, patent agent, for "*Improvements in centrifugal pumps, and in the joints or junctions of pipes and tubes.*" A communication. Dec. 19, 1866.

3345.—David Allan Graham, of the city and co. of Perth, N.B., engineer, for "*Improvements in the construction of steam and water traps, and in the floats and valves for the same; also to some extent applicable to other fluid-regulating vessels for controlling the flow of the fluids passing through them.*" Dec. 20, 1866.

3349.—Edward Dorsett, of the City of London, for "*Improved arrangements and apparatus for removing or transferring tar or similar materials from one place or receptacle to another.*" Dec. 20, 1866.

GRANTS OF PROVISIONAL PROTECTION.

3017.—Charles William Dixon, of Wickham Market, in the co. of Suffolk, engineer, for "*Improvements in slide-valves.*" Nov. 17, 1866.

3029.—Julian Bernard, of 47, Lincoln's Inn Fields, London, but at present residing at 50, George Square, Glasgow, N.B., for "*Improvements in motive-power engines, parts of which are specially adapted for raising and forcing water and for other mining purposes.*" Nov. 19, 1866.

3055.—Charles James Wahab, of Valleyfield, N.B., civil engineer, for "*Improvements in purifying polluted water.*" Nov. 21, 1866.

3136.—Louis Alexandre Fargon, of Brussels, in the kingdom of Belgium, engineer, for "*Improvements in forming the joints of iron and other tubes or pipes.*" Nov. 28, 1866.

3156.—James Webster, of Birmingham, in the co. of Warwick, mechanical engineer, for "*An improved lighting, heating, and cooking apparatus.*" Dec. 1, 1866.

NOTICES TO PROCEED.

2025.—John Hamilton, of Glasgow, in the co. of Lanark, N.B., merchant, for "*Improvements in artificial material for producing gas for illuminating purposes.*" Aug. 6, 1866.

2183.—Josiah George Jennings, of Palace Wharf, Stangate, in the co. of Surrey, sanitary engineer, for "*Improvements in water-closets, urinals, and taps.*" Aug. 24, 1866.

2244.—Charles Denton Abel, of 20, Southampton Buildings, Chancery Lane, in the co. of Middlesex, patent agent, for "*Improvements in joints or connexions for pipes.*" A communication. Aug. 31, 1866.

PATENTS WHICH HAVE BECOME VOID

BY REASON OF THE NON-PAYMENT OF THE ADDITIONAL STAMP DUTY OF £50 BEFORE THE EXPIRATION OF THE THIRD YEAR.

2886.—William Matthieu Williams, "*Improvements in apparatus for the distillation of coal and peat, and such other substances as are or may be used for the manufacture of solid and liquid volatile hydrocarbons, or for the manufacture of the said hydrocarbons and coke.*" Nov. 18, 1863.

2924.—William Edward Newton, "*Improvements in the construction of fan-blowers for ventilating and other purposes.*" Nov. 20, 1863.

2963.—George Parkin, "*Improvements in apparatus employed in the manufacture of paraffin and other like oils from shale, cannel, and other minerals.*" Nov. 25, 1863.

2968.—John Hays Wilson, "*Improvements applicable to ships and other lift pumps.*" Nov. 25, 1863.

2971.—Richard Laming, "*Improvements in preparing materials useful in the purifying of gas from sulphuretted hydrogen, carbonic acid, and ammonia, and in making ammoniacal compounds.*" Nov. 26, 1863.

2973.—James Simmonds, "*Improvements in stink-traps for water-closets, sinks, and other purposes.*" Nov. 26, 1863.

2981.—Frederic Page, "*Improvements in furnaces and apparatus for the manufacture of volatile hydrocarbons, which improvements are also in part applicable to furnaces and apparatus for the manufacture of illuminating gas.*" Nov. 27, 1863.

3003.—Charles Pontifex, "*Improvements in the construction of stop and other cocks or valves, and in the means of connecting them and the ends of flexible hose-pipes together.*" Nov. 30, 1863.

3017.—George Glover, "*Improvements in dry gas-meters.*" Dec. 1, 1863.

Legal Intelligence.

COURT OF QUEEN'S BENCH.

GUILDHALL, TUESDAY, DEC. 18.

(*Before Lord Chief Justice* COCKBURN *and a Special Jury.*)

CORAM ET UXOR *v.* ANDERSON AND ANOTHER.

Mr. Huddleston, Q.C., and Mr. Barnard appeared for the plaintiff; Mr. Hawkins, Q.C., Mr. Archibald, and Mr. Lanyon, for the defendants.

Mr. Barnard opened the pleas. The plaintiff, he said, was John Coram, and the defendants were George Anderson and Robert Hesketh Jones, and the declaration alleged that they altered a certain public highway in the town of Dover, and wrongfully and negligently suffered it to be dangerous to persons passing along, whereby Elizabeth, the plaintiff's wife, was thrown down and injured.

Mr. Huddleston said that the plaintiff, Mr. Coram, brought the action to recover compensation in damages for a very serious injury which his wife had sustained in consequence of the negligence of the defendants. Mr. Coram for many years—as many as 16 he believed—had been the superintendent of police at Dover, and the defendants, Mr. Anderson and Mr. Jones, were contractors under the gas company in that borough, and the negligence on their part which was alleged against them was, that having, under the provisions of the Act of Parliament, taken up a public road, they had not reinstated it properly, but left it so that it was dangerous to the persons passing along. Now, the facts attending the accident which had unfortunately happened to Mrs. Coram were these. On the night of the 26th December, 1865, she had been with her sister, Mrs. Douglas, to the house of her son-in-law, who lived in the Military Road, and was returning home some time about ten o'clock at night, going along the Bowling Green Lane—a steepish kind of thoroughfare, with a narrow footpath separated from the road by means of pitched stones—when suddenly she found herself striking against something, and fell to the ground. The consequences were disastrous. One of her legs was broken in two places, and her ankle was sprained. A chair was procured, and the poor woman was conveyed to her home, where she was confined to her bed for several weeks and suffered very severely indeed. Though now recovered sufficiently to attend that court, she had not fully recovered the use of her limbs, and evidently it would be some time before she would be able to walk without assistance. Upon an examination being made of the spot where she had fallen, it was found that the roadway had been broken up, and, as he supposed, under powers given to the contractors by the gas company's Act in the borough of Dover; and it turned out that the defendants, who were contractors to the gas company, had employed men to open

the ground for the purpose of getting at or putting a pipe down, and that instead of closing the road properly, and covering the top with proper metalling and punning it down, it seemed that they had merely filled up the hole they had made four or five days previously, and so left it, there being a space of four or five feet in length, and about two feet six inches in width, which had not been metalled, but only covered with a sort of chalk soil, which had got wet and so became slippery. This, no doubt, was an obstruction in the highway, and it was evident that Mrs. Coram had put her foot upon this chalky mixture and slipped down, and so caused the injuries he had mentioned. Now, he (the learned counsel) thought his lordship would tell the jury that inasmuch as persons connected with a gas company could only interfere with public roads by virtue of the provisions of an Act of Parliament—though they did that—the persons they employed must strictly follow out the law. The Dover Gas Company's Act was incorporated the General Gas Companies Act, and by the 10th section of the 10th and 11th Vic., cap. 15, it was enacted—"That if any company broke up the road or pavement of any street or bridge, or any sewer, drain, or tunnel, they should with all convenient speed complete the work for which the same should have been broken up, and fill in and reinstate the road or pavement, and so forth." In this case, the jury would find that that the road was broken up by the defendants men, and that instead of reinstating and making good the way, they neglected doing so, and a serious accident had occurred. He (the learned counsel) was prepared with witnesses to show that the course which the company ought to have adopted would have been to have filled up the hole with earth (or if left open it ought to have been protected by means of planks and tressels or a light), and the following day it ought to have been punned down, and so made perfectly hard and secure, and safe for persons to pass over. When the attention of the defendants was called to the accident, they did that which they ought to have done before. They lowered the soil which they had filled in, and punned it down to the level of the roadway, and so put it in that state which it at first ought to have been. Having thus given a brief outline of the accident, the learned counsel said it would be for the jury to say what amount of damages they, in their judgment, considered the plaintiff was entitled.

Mr. HAWKINS said that, in order to save the time of the court, he would take an objection at once to the case proceeding further, and would observe that inasmuch as the accident happened at Dover, it ought to be made a local action, and ought not to be tried in that court. The bringing such an action in London, he contended, could not be justified. He would call the attention of his lordship to a direct authority in support of his objection—the case of *Richardson v. Lockey* (34 Law Journal, Queen's Bench)—in which the defendant, in altering and converting a certain footway, negligently and improperly left a tree in the middle of the path, and also filled up the ditch and placed faggots there, which became unsound in time and unfit for use. The plaintiff, in consequence of this, fell when crossing and was injured, and the pleas in that action were, first, not guilty; secondly, that the plaintiff was not lawfully along the footpath at the time; and thirdly, that what the defendant had done was done by him under and by virtue of licence and authority. The action was tried, and the plaintiff was nonsuited, on the ground that the cause was a local one, the place where it happened being situated in the county of Essex.

Lord Chief Justice COCKBURN: On what ground?

Mr. HAWKINS: On the ground that there is no statement of locality in the body of the declaration, and where such is the case, the marginal notes must be deemed to be incorporated with it where it is local. This is shown in 1st Taunton's Reports, *Warren v. Webb*.

Lord Chief Justice COCKBURN: Well, really, Mr. Hawkins, is it worth while? This is a case which must be tried sooner or later, you know. Why raise such an objection?

Mr. HAWKINS: I am sorry, my lord, that I am not in a condition to waive my objection at present.

Mr. HUDDLESTON: I think my learned friend is not in a condition to make his objection at present, except so far as my opening is concerned.

Lord Chief Justice COCKBURN: It would certainly be waste of time if evidence was taken, and then the objection was made. But it would be hard indeed to deprive these poor people of the benefit which they expect, and under such an objection nonsuit them. If the objection is persisted in, it will be one of the shabbiest proceedings on the part of a company that I have ever heard of.

Mr. HUDDLESTON: Looking at the authority mentioned by my learned friend, it seems to me to go upon the ground that a tree lying upon a highway was a nuisance to the highway.

Lord Chief Justice COCKBURN: And so is this obstruction in the road at Dover a nuisance.

Mr. HUDDLESTON: The defendants suffered the highway to be dangerous to persons passing along.

Lord Chief Justice COCKBURN: There is no doubt of it being a nuisance. If a public nuisance is productive of private injury, damages ought to follow. I am very much grieved to have to lean to the opinion expressed in the objection quoted by Mr. Hawkins, and I do not like to trust myself to say more than I have said.

Mr. BARNARD: The defendant in *Richardson and Lockey* was a wrongdoer.

Lord Chief Justice COCKBURN: So are the defendants in this case. If they did not restore the road to its previous condition they are guilty of a nuisance.

Mr. BARNARD: They were authorized by the Act, and did not properly fulfil it.

Lord Chief Justice COCKBURN: I think the case, Mr. Hawkins, had better go on, with leave hereafter to move for a nonsuit. I will try, in the hope that between this time and then you will be in a position to suit your clients.

Mr. HAWKINS: Very well, my lord. If there is a verdict for the defendants I certainly shall not trouble myself after a nonsuit.

Edward W. Spayne was then called, and deposed to residing in Military Road, and to being the son-in-law of the plaintiff. On the evening of the 26th December last, Mrs. Coram and her sister, Mrs. Douglas, visited his house, and left for their home about ten o'clock. Shortly after they had left Mrs. Douglas returned, and said that her sister, the wife of the plaintiff, had met with an accident in Bowling Green Lane. Witness hastened to the spot, and found Mrs. Coram there, together with several persons who had been attracted by the circumstance. Mrs. Coram complained of her legs. She was placed in a chair and taken home, and a surgeon was sent for. Witness afterwards went to the spot, and by the aid of a policeman's lantern, he saw what the state of the ground was. There was a heap of chalk soil, about four or five inches high, in the centre of the road; on the crown of the rise, and from the crown of the rise to the lower part of it, there was a deep indentation, perhaps fourteen or fifteen inches long, as if a person had slipped from the crown of the rise to the lower part.

Lord Chief Justice COCKBURN: Was there any hole?

Witness: No, my lord. There was a kind of hillock, with an indentation along it. It was, as near as possible, in the centre of the road. The other part of the road, he supposed, was metalled. It was, he believed, covered with granite. It was granite or flint metalling; he would not say which. There was no metalling on the top of the portion of the road where the indentation was visible. Could not say whether the chalk had been placed upon metal. The subsoil of nearly the whole of Dover was chalk. There was a footpath on one side of the road, but it was narrow, and dangerous for passengers to walk upon. Always preferred the road to the footpath. Saw the spot on two or three occasions after the accident. It was a dark night, and the place where Mrs. Coram fell was intermediate between two lamps. There was about 170 or 180 feet between the lamps, as far as he could judge. Would undertake to swear that the chalky part was more than 1 or 2 inches high. To say that such was the height would be ridiculous. It was opposite Mr. Hasting's house where the accident occurred. Did not try himself with his foot if the ground was soft. There was *primâ facie* evidence of that. There was a mark as if a person's foot had slipped down. The indentation was nearly three-quarters of an inch deep. The rest of the road was hard, and not by any means chalky. It was roughly metalled, but whether by granite or flint he could not say.

Lord Chief Justice COCKBURN: In what portion of Dover is Bowling Green Lane?

Witness: In the western portion of the town, at the base of the hill leading to the western heights.

By Mr. HUDDLESTON: The indentation was away from the crown of the rise, and not towards it. It was exactly as if somebody had slipped and fallen.

Mrs. *Coram* was then examined. She deposed: I am the wife of the plaintiff, who has been superintendent of police at Dover for 16 years. On the night of 15th December I had been at the house of my son-in-law, Mr. Spayne, in the Military Road, and was returning down Bowling Green Lane with my sister, Mrs. Douglas, about ten o'clock, or a little after. I was walking down the road very slowly and steadily till I got to a place which seemed to rise a little. It seemed to me as if there was a heap of mortar, or something of that sort, in the road, and as I trod upon it it carried my feet away. I slipped and fell, and I remember scarcely anything more. I was walking in the middle of the road, because I preferred it, considering that the pavement was unsafe and dangerous. It was a very dark night. When I slipped and fell it seemed as if my back rested on something higher than the road. I believe that Mrs. Douglas, my sister, went immediately for assistance, but I cannot say how long it was before any one came to me. I was attended at my home by Dr. Drew. My leg was broken in two places, and my ankle was sprained. I feel the effects of the injury at the present time. I was confined to my bed from eight to nine weeks. I cannot say how long Dr. Drew attended me. When he left Dover I was attended by Dr. Druke, his partner, and he has attended me more or less ever since. I am not able to walk without assistance. I suffer considerable pain, and have very restless nights.

In cross-examination by Mr. ARCHIBALD, *Witness* said that she often walked along Bowling Green Road on the way to her home. Had never found the lane slippery before. There was nothing but sand and gravel laid there. There was no chalk. Had no light with her at the time of the accident. There was not so much traffic up and down that road as along the Military Road. Was wearing goloshes at the time she slipped. Had worn goloshes for many years. Had slipped before. It was about a minute's walk from her son-in-law's house when she fell. Had no recollection of two men named Dickenson and Robins coming to her assistance.

Mr. *John Coram*, the plaintiff, said that he was superintendent of the Dover police. On returning home on the night of the 16th of December, he found that his wife had met with an accident in the manner described. The defendants were gas contractors. Witness had always sent to them when anything had been the matter with the gas or the roads, and it had been put right. On the morning after the accident witness went to Bowling Green Lane, and found that a portion of the road had been disturbed, more especially that which was opposite Hasting's house. There was a space of about four feet which had apparantly been taken up and filled in again. Saw that it was very soft and slippery. The roadway had been raised about four inches, but would not be positive as to the exact height. The other part of the road was metalled, but there was no metalling on the part that had been raised. There was a large stone that had stuck in the soft or chalky part. Made a complaint two days afterwards to Mr. Hanvey, the town surveyor, as to the condition of the road, and visited the spot on the day following. Found about two inches had been taken off the soft part, and the soil spread over other portions of the road, so that the space was made wider. Saw Mr. Fox, the defendant's attorney, and complained to him of the accident. There was no denial by Mr. Fox at that time or afterwards that the road had been altered by the defendants. [Witness handed in the doctors bills.] They amounted to £10 13s. 6d. In addition to the sum witness had incurred other expenses, something like £30.

In cross-examination, *Witness* said that rain had fallen on the night of the accident. Saw the spot next morning between ten and eleven o'clock. Had occasion frequently to pass up Bowling Green Lane, but had not noticed the place that had been disturbed prior to the accident. Reports were not made to witness when roads were opened. Measured the depth of the part disturbed merely with his stick. Did not venture to tread upon it. The road was macadamized. Could not speak as to the width. A great deal of water ran down the middle of it in wet weather. Could not say whether there were gutters at the sides. Had not disbursed the charge for attendance other than the medical charge at present. His wife was attended by his daughter and a married sister of his wife's. Had had to pay for flys and other things. His daughter and sister-in-law had made no demand at present. Had paid about 12s. for flys. Had had to send for brandy and wine, which were ordered to be procured by the medical men. Could not say what he had expended in that—probably £3 or £4. Went to Mr. Fox two months before the action was brought; was then told that he had seen Mr. Jones, who would not meet him (witness) in respect to damages, and consequently after waiting two months he was compelled to bring the action.

In reply to Mr. HUDDLESTON, *Witness* said that his wife had had to have extra nourishment from the time when her leg was broken to the present.

Mrs. *Douglas* was called, and entered the witness-box, when the learned gentlemen consulted, and, in a few minutes, Mr. HUDDLESTON, addressing the court, said that he and his learned friend, Mr. Archibald, had considered the question, first of all looking to the objection which Mr. Hawkins had raised on the opening of the case, and he was happy to inform the court that

Mr. Archibald had met him very fairly, and, with the permission of his lordship, they would take a verdict on terms for £125, no further proceedings to arise.

Lord Chief Justice COCKBURN: Very well.

Mr. ARCHIBALD: I must say that my clients commiserate very greatly with Mrs. Coram, the unfortunate person who was injured on the night in question, and they are content to offer those terms, which have been accepted.

Lord Chief Justice COCKBURN: I am glad to hear it. One cannot blame them for trying the question, but I do think it would have been a pity to have had all the parties sent away on the objection which Mr. Hawkins raised at the outset of the case. However, a result has been obtained which all parties seem to be well satisfied with.

A verdict was then taken for the plaintiff for £125.

MIDDLESEX SESSIONS.

WEDNESDAY, DEC. 19.

(*Before* W. H. BODKIN, *Esq., Q.C., Assistant Judge.*)

John Fisher, 23, baker, was indicted for stealing 6800 feet of gas, value 20s., the property of the Independent Gas and Coke Company.

Mr. METCALFE and Mr. COLLINS prosecuted; Mr. M. WILLIAMS defended the prisoner.

It appeared from the evidence that the prisoner, who was charged with stealing a quantity of gas, the property of the Independent Gas and Coke Company, is a baker, carrying on business at No. 1, Shepperton Terrace, Hoxton, where he used seven or eight burners, and it was alleged that he had disconnected the supply-pipe from the gas-meter, and surreptitiously obtained gas without any registration of it in the ordinary manner. The chief witness in the case was a man named Thomas Godley, who lived in the service of the prisoner on two different occasions, and he stated that while he was with him he saw the service-pipe disconnected from the meter, and a piece of gutta-percha pipe attached, so that all the gas then used went direct to the shop and was consumed. This, he said, was done on several occasions, and particularly on Good Friday, when the gutta-percha tube was attached and gas was burnt from six o'clock at night until about two o'clock the following morning. He once asked the prisoner what the gutta-percha tube was there for, and he said it was because the meter was out of order. On one occasion the prisoner asked him when he thought the gas company's men would come round, and he told him that he did not know. Rumours of the illegal consumption of gas having come to the knowledge of the company, at an unusual and unexpected period, Mr. Armitage, an inspector of the company, went to the prisoner's shop and asked to examine the gas-meter. According to his statement the prisoner asked him to go behind the counter, and Mr. Armitage, thinking the meter was there, did so, but had no sooner done so than the prisoner was observed to be stooping down on the outside of the counter. On Mr. Armitage going round he found that the meter was near to where the prisoner had been stooping down, and on the inspector looking at the meter he found the two joints of the meter-pipes to be extremely loose, and one of them was almost off. The inspector asked him how he accounted for this, and he then said that a man had come in on the Sunday morning and had taken it off to repair it, but he had gone out for a pint of beer and had never come back. The inspector said that was all nonsense, as he knew differently, and believed that he had been robbing the company. He further said that he should cut the gas off, and if he had anything to say about it he must go the office. (Mr. Armitage, by means of a similar meter, showed the jury how the gutta-percha pipe could be attached, and the very rapid manner in which it could be removed if necessary.) The witness Godley, in his cross-examination, admitted that there had been charges against him of dishonesty, but he had paid the money and had never been prosecuted. The gas having been cut off, the prisoner was asked to go to the office to offer any explanation he liked; but he never attended, and a summons and afterwards a warrant were issued for his apprehension. During the quarter ending Lady-day, 1865, the meter registered 18,700 cubic feet of gas consumed; and the corresponding quarter of 1866, only 11,900 cubic feet, making an apparent loss of about 6800 cubic feet of gas, of the value of about £1. The prisoner was apprehended by Israel Watts, 184 N, at his own house-door at eight o'clock on the night of the 28th of November, and he was told that he was wanted on a warrant for stealing gas from the Independent Gas Company, when the prisoner said, "Step inside; can't you let me be till to-morrow? I'll drop you a few bob and go and try to square the matter." He was told, however, that he must then go to the station-house, when he said he had been to Liverpool, and had been back for five weeks; but the police had been in the meantime looking for him.

Mr. M. WILLIAMS called the uncle of the prisoner to prove that he was at the place when Mr. Armitage called, and it was impossible that the prisoner could have done anything to the meter. Had he done so he must have seen him, as he was never out of his sight.

Mr. M. WILLIAMS afterwards addressed the jury for the prisoner, and contended that the whole case rested on the evidence of the witness Godley, who, from his antecedents, was altogether unworthy of credit.

Mr. METCALFE replied, pointing out the fact that the prisoner was almost found in the very act of disconnecting the gutta-percha tube from the meter, and that other circumstances, independently of the evidence of Godley, left no doubt of his guilt.

The ASSISTANT JUDGE summed up the evidence.

The Jury, after some consultation, said they considered the evidence insufficient, and returned a verdict of "Not guilty."

Miscellaneous News.

IMPERIAL CONTINENTAL GAS ASSOCIATION.

The Ordinary Half-Yearly General Meeting of Shareholders in this Company was held at the London Tavern, on Wednesday, Nov. 28—BENJAMIN ATTWOOD, Esq., in the chair.

The usual preliminaries having been complied with,

The CHAIRMAN called upon Mr. Pearce (Pearce, Phillips, and Pearce, solicitors) to read the report, of which the following is a summary:—

The report stated that the workings at the several stations had been good, showing plainly the effect of the great diligence and perseverance of the able and intelligent officers in their endeavours to promote, by every means in their power, the interests of the association.

The consumption of gas and the number of lights had continued to increase.

Great reductions in the prices charged for gas had from time to time been made, in order to comply with the wishes of the consumers and conciliate the authorities of the towns.

To meet the increased and ever increasing demand for gas, a very large amount of money had necessarily been expended in new works and extension of mains.

At Berlin the consumption of gas was very large, and still increasing.

At Amsterdam the workings had been good, and large and extensive preparations were being made for commencing the lighting, under the new contract, on the 1st of September next.

At Haarlem the attempt that was made by the association (as mentioned in the last report) to obtain an extension of their contract had not succeeded, the Town Council having refused to ratify the new contract agreed upon by the burgomaster; the lighting, therefore, was according to the terms of the existing contract, and the consumption of gas continued to increase. Some difficulty had been experienced in obtaining an adequate supply of German coal at that station, and it had been necessary to send coal from England at an extra cost.

The new works erecting at Brussels, referred to in former reports, were fortunately coming into operation. It would have been difficult to supply all the gas required there during the coming winter from the old works.

At Ghent the new works, also referred to in former reports, were in full operation. There could, therefore, exist no fear of insufficient supply of gas for the present, though the increased demand was very great. The same remarks applied also to the Antwerp station.

At Lille the necessity for the erection of new works compelled the president and directors to purchase recently a piece of land at a very large price, whereon to build the works, which must be immediately proceeded with.

At Bordeaux the increased consumption of gas was such as to require a large outlay to be made in works and mains to produce the quantity required.

At Toulouse, as mentioned in the last report, the concession was drawing near to its termination, and would expire on the 26th of February, 1871, and, unless it should then be renewed, it would not be necessary to make any further large expenditure there.

It was mentioned in the last report that the railroad company at Marseilles were about to take a portion of land of the association; this they had now done, but not to so great an extent as was at first supposed they would require. The price which they had paid for it was very much below what might have been reasonably expected; but, as the amount was awarded by a jury appointed to determine the price to be paid, there was no alternative but to accept it.

At Cologne the new contract referred to in the last report had not yet been definitively settled, but it was believed that the Government officer to whom the contract had been submitted for approval had made some alterations in it, the effects of which had not as yet been fully ascertained; the president and directors, meanwhile, would not fail to give to this subject their most earnest attention, with the view to bring it to the most satisfactory conclusion that the case would admit of.

At Aix-la-Chapelle the increased demand for gas had been large, and, as elsewhere, every possible means had been adopted in order to reduce the cost of its manufacture, and so compensate for the very low price which the association had been compelled to accept under the new contract.

With respect to Hanover, Frankfort, and the very important station of Vienna, the trade of the association in those towns had been naturally to some extent affected by the late war, which had, however, at the date of the accounts now under consideration, the 30th of June last, scarcely commenced, was singularly brief in its duration, and terminated some months since. The president and directors would use their utmost energies, with the assistance of their active and valuable officers at the stations, to render the result of that war as little onerous to the association as possible.

The president and directors, in calling the attention of the shareholders to the accounts, were gratified to perceive that the accounts for the half year to the 30th of June last showed such an amount of profit as would enable them to make the same large distribution amongst the shareholders as had been made on the previous half year—that is to say, a dividend of £2 10s. per share and a bonus of £1 per share, payable on the 15th of December next, free of income-tax—and at the same time to provide an amount which they trusted would be sufficient to meet contingencies, and for the repairs and necessary extensions and improvements of the works, in order to supply the increased quantity of gas required.

It had been suggested to the president and directors by a few shareholders of the company to change the line of policy which had been long pursued, by increasing the number of shares and dividing a larger portion of the income of the association. The president and directors had bestowed on these suggestions the consideration which they would always wish to give to anything which proceeded from the shareholders. They were, however, thoroughly convinced that the prosperity of the association could only be maintained by keeping its efficiency undiminished, and that its income could not be kept up without the annual expenditure of as large sums of money as had been laid out for several years past. They therefore felt bound to adhere to that prudent course in the conduct of the transactions of the association which they had hitherto followed, and without which they were satisfied that consequences of a very disastrous character would inevitably ensue.

The president and directors had sincerely to regret the loss of two of their colleagues by death since the last meeting of the shareholders, John Frederick Pike Scrivener, Esq., and John Clarmont Whiteman, Esq.

Both these gentlemen had been for many years directors of the company, and were always most assiduous in their endeavours to promote by every means in their power its welfare and success.

The president and directors would shortly take steps to fill up the two vacancies which had thus unfortunately occurred.

The CHAIRMAN: Gentleman, that is the report which the directors have thought it right to lay before you on the present occasion. Its details are so ample and so full, that I think it must be sufficient to satisfy every shareholder that the best attention which the board of directors could give to the affairs of the company has been bestowed upon them. I therefore do not think it necessary at present to make any further remarks, but will at once propose that the report be received and adopted. If any gentleman wishes to say anything upon that subject I shall be glad to hear him.

Mr. S. A. BECK said before the motion was put he should like to make a few observations. Three years and a half ago he offered some suggestions for altering the scheme upon which the profits were divided. At that time he said he had no hostile feeling towards the board, and he could repeat that statement. But he would go at once to the simple question, which he thought all should have fairly brought before them, and that was the amount of profit which the company earned, and the amount divided amongst the shareholders. He considered that a much larger sum ought to be distributed to the proprietors, and could not for the life of him see why the directors each half year carried so large a sum to what was described as a guarantee-fund. He knew that he should have a difficulty in persuading the very able, respectable, and sage body of gentlemen, who formed the direction, that their policy was wrong, but he was content to leave it to the good sense of the proprietors at large.

Mr. J. W. CATER concurred with the board in thinking that a conservative policy was a good one, but was of opinion that it was carried too far.

Mr. MICHAEL said he had joined with other gentlemen in laying proposals before the directors for an alteration in the mode in which the profits were divided, and he was sorry that the directors had not accoded to those propositions. He was thankful to the directors for the attention which they had paid to the company's affairs, but at the same time he could not understand why they could not adopt the views of himself and others, when it was the very same principle that was carried out when the new Act of Parliament was obtained, from which time their prosperity might be said to date. He maintained that the price of the shares in the market did not represent their full value, and this he contended ought to be the case.

Mr. T. N. STOKES was much pleased with the report, and should be sorry to see any change made in the conduct of the affairs of the association, especially at a time when three of their stations were suffering from the effects of the late war, and no one could tell what the ultimate consequences might be. The directors had managed the concern in a masterly manner, and he had the utmost confidence in their management. Consequently he did not desire to see a departure from the course which had been hitherto pursued.

Mr. MICHAEL said, as the directors had the power of appointing two new members to fill the vacancies which had occurred in the board, it would be

an act of conciliation if one gentleman at least holding views similar to his were elected a member of the board, so as to be able to bring his opinions calmly and temperately before his colleagues.

Mr. MORGAN YEATMAN said the last time Mr. Wolverly Attwood occupied the chair he held out a hope of change, but the report which had been read that day was of an opposite character, and this he regretted.

Mr. R. P. BROWNE was surprised that there should be a proposition to alter a course which had hitherto been so successful. He only wished with all his heart, for the sake of shareholders generally, that the directors of the Imperial Continental Gas Association had been directors of other companies, because, if so, much misery would have been prevented. He disapproved of electing a gentleman to the board who held the views of Mr. Michael, and others. He claimed a certain amount of independence, and expressed his opinion, not offensively, he hoped, to any one, but as their property had been safe in the hands of the present board he hoped it would so continue.

The CHAIRMAN, in replying to the various observations which had been made, said: The suggestions which had come from Mr. Michael had been answered over and over again. As to the proposition to elect one of Mr. Michael's friends a member of the board, he could only say that he thought it would be better for the directors to keep their own counsels. He would also remind gentlemen that some years ago a shareholder stood up in a public meeting and offered to sell 1000 shares in the company for £1000, and no one would buy them, whereas at the present time those 1000 shares were honestly worth £100,000, and he believed that any man who had £100,000 to invest could not do better than purchase 1000 shares in this association. He thought gentlemen ought to be satisfied with management which had resulted in such an improvement.

The resolution for the adoption of the report was then carried unanimously.

A resolution authorizing the payment of a dividend of £2 10s. per share, and a bonus of £1 per share, making £3 10s. per share for the half year ending the 30th of June last, free of income-tax, was carried unanimously.

Mr. S. A. BECK then moved a vote of thanks to the directors for their able management of the company's affairs during the past half year.

Mr. MICHAEL seconded the resolution with much pleasure, and it was unanimously carried.

The CHAIRMAN briefly acknowledged the vote, and a vote of thanks to Mr. Drory, the chief superintendent, for the attention which he paid to his duties at the several stations on the Continent, unanimously passed, brought the proceedings to a close.

METROPOLIS GAS SUPPLY.

CITY COURT OF SEWERS, GUILDHALL—TUESDAY, DEC. 11.

At the Meeting of the Commission, held this day—Deputy DE JERSEY in the chair,

The Streets Committee reported as follows:—

We have considered the question referred to us on the 30th of October last as to taking proceedings against the gas companies in regard to the excessive amount of sulphur in the gas supplied by them, and have had laid before us Mr. Hawksley's report, which we append hereto. We beg to recommend that your honourable court do make complaint to the Secretary of State in regard to the quality of the gas supplied by the Great Central Gas Consumers Company of the City of London during the twelve months ending on the 29th of September last, as from time to time reported by Dr. Letheby, and that it be referred back to us to prepare and lay before the Secretary of State a memorial under the provisions of the Metropolis Gas Act, 1860, praying him to take steps therein as provided by the said Act.

The following is the report of Mr. Hawksley, referred to in the report:—

30, *Great George Street, Westminster, Nov.* 28, 1866.

Gentlemen,—I have the honour to report that I have completed a course of elaborate experiments, conducted on a large scale, for the purpose of ascertaining the amount of sulphur present in coal gas after purification by reasonable and practicable means, and that the general result is that the minimum amount of sulphur may be considered to be 12 grains in every 100 cubic feet of purified gas, and the maximum amount about 16 grains in every 100 cubic feet of purified gas.

It is necessary to mention that the purification by oxide of iron, which possesses no alkaline properties, will not bring the amount of sulphur compounds within these limits, but the purification by lime, or partly by oxide of iron and partly by lime, and still more advantageously when effected partly by oxide of iron, partly by lime, and partly by washing with the crude ammoniacal liquor produced in the process of gas-making, will very certainly produce the stated results.

It is, of course, essential that the purifying apparatus should be properly adapted, and be properly used, in order to secure a proper result. The arrangements necessary for the purpose are, however, of a simple character, and are not unduly expensive.

The additional cost of manufacturing, including the materials of purification, labour, and the interest on the capital invested in the plant, will amount to about one penny per 1000 cubic feet.

It appears to me that the peculiar sulphur compound (commonly designated bisulphide of carbon) upon which the oxide of iron usually employed in gas purification, exercises little or no influence, but upon which both lime and ammonia exercise powerful influences, is not derived from the iron pyrites visible in the coal, but more probably from a combination of sulphur and organic matter naturally existent in the coal in a non-apparent form.

I do not find that those varieties of coal remarkable for so-called "brasses" yield a larger proportion of bisulphide of carbon than do those varieties which are sensibly free from "brasses."

I have been assisted in all my investigations by Dr. Letheby, to whom I am indebted for all the chemical analyses which have become necessary in the course of my inquiries.

I have the honour to be, &c.,

(Signed) T. HAWKSLEY.

To the Commissioners of Sewers of the City of London.

The CHAIRMAN stated that the corporation had determined not to proceed with their bill next session, in consequence of the Government having given notice to legislate for the whole metropolis. They believed that the true policy of the corporation would be to give the Government all the support in their power. The amount of sulphur in the gas of the Great Central Gas Company continued to be so excessive that the committee recommended an appeal to the Secretary of State to bring the facts before the Government.

Deputy FARRAR supported the report of the committee.

Mr. F. COX remarked that the proposition of the committee must not be considered antagonistic to the actions of the Common Council. The corporation were well advised in not prosecuting their gas bill in the next session, believing the Government desirous to remedy the evils of the present monopoly.

The motion to agree with the committee in their report was then adopted, and it was further decided that the same should be printed, and Mr. Hawksley's letter appended thereto, and a copy sent to each member of the corporation.

Dr. LETHEBY laid before the court the following report of the illuminating power of the gas supplied to the City of London during the Autumn quarter of 1866:—

"*To the Honourable Commissioners of Sewers of the City of London.*

"Gentlemen,—In the course of the quarter which expired on Saturday last, there were 695 examinations of the illuminating power of the gas supplied to the City, 250 of which were of the Great Central gas, 222 of the Chartered, and 223 of the City. Each examination was the average result of ten observations, and the gas was burnt at the rate of 5 cubic feet per hour from a Sugg's steatite Argand burner of 15 holes with a 7-inch chimney. The results were as follows:—

	Illuminating Power in Standard Sperm Candles.		
	Maximum.	Minimum.	Average.
Great Central Company's gas . .	15·47 . .	12·55 . .	13·89
Chartered Company's gas . . .	16·95 . .	12·18 . .	14·19
City of London Company's gas . .	15·64 . .	13·27 . .	14·17

"In the corresponding quarter of the last three years the average illuminating power of the Great Central gas was equal to that of 13·47 standard sperm candles; of the Chartered, to 13·12; and of the City Company, to 14·10. It appears, therefore, that during the last quarter the illuminating power of the gas supplied to the City has not at any time been less than the standard of the Act of Parliament, and that the average power of it has ranged from 16 to 18 per cent. above the requirements of the Act.

"As regards the chemical quality of the gas, I have to report that I have not at any time found it charged with sulphuretted hydrogen, and, excepting in the Chartered gas, there has never been an excess of ammonia. The amount of sulphur in the gas has been very variable, as will be seen from the following table:—

	No. of Observations.		Grs. Sulphur per 100 Cub. Ft.		
Gas of	Total.	When in excess.	Max.	Min.	Average.
Great Central Company . .	53 . .	50 . .	29·93 . .	16·98 . .	23·39
Chartered Company . . .	60 . .	8 . .	22·38 . .	10·43 . .	17·15
City of London Company .	52 . .	18 . .	24·11 . .	8·44 . .	17·14

"So that, of the 165 testings of the gas of the three companies, 76, or nearly half, were found to yield an excess of sulphur. The chief excess has been in the gas of the Great Central Company, for on 50 out of 53 occasions when it was tested, it furnished more than 20 grains per 100 cubic feet of gas. The Chartered Company, on the other hand, has failed but 8 times out of 60 to conform to the provisions of the Act of Parliament. The average amount of sulphur in the Great Central gas has been 23·39 grains per 100 cubic feet; in the Chartered gas it has been 17·15 grains; and in the City gas, 17·14 grains.

"Lastly, I have to report that the pressure at which the gas has been supplied to the public has ranged from 1 inch of water to nearly 3 inches, the average pressure having been an inch and a half.

"*Guildhall, Dec.* 4, 1866." "HY. LETHEBY, M.B.

It was ordered that the report be printed, and a copy sent to every member of this court and of the Court of Common Council.

METROPOLITAN BOARD OF WORKS.

The Weekly Meeting of the Board was held at the Office, Spring Gardens, on Friday, Dec. 14—Sir JOHN THWAITES in the chair.

Mr. SAVAGE introduced a deputation from a meeting of delegates appointed by the vestries and district boards of London on the gas question, held that morning at St. James's Vestry Hall, to request the board to delay making a final report to the Government on the subject of the proposed amendment of the Metropolis Gas Act, 1860, until a meeting of delegates to be held at St. James's Vestry Hall, on Tuesday, the 18th, by adjournment from the week previous, when the subject of clauses in the Government bill would come before the meeting.

Dr. BREWER, addressing the board, said it might not, perhaps, be generally known that the vestries had appointed certain delegates to consider what practical steps should be taken with regard to the supply of gas to the metropolis. Those delegates met under some little difficulty three or four weeks since, and had subsequently had the question under discussion. But the most vital part of the subject yet remained undisposed of, and was to be brought forward at a meeting which was fixed for Tuesday next. On that occasion it was expected there would be a very large representation of the various local authorities of the metropolis, and that many valuable suggestions would be offered which would be instrumental in bringing about the desired amendment of the relations between the gas consumers and the gas companies. The delegates had been informed that the Metropolitan Board, "that very important body, the very symbol of municipal power in the metropolis," were about this day to consider the question, and they thought it would be well to send the present deputation to ask whether the board could not defer the expression of final judgment upon the report of the gas committee until the delegates had it in their power to bring before them the results of their deliberations thereon in the form of some practical suggestions. They asked this because they felt that the board was the representative of the vestries, and in whatever way the vestries acted this great body had naturally a prime voice and ear in the various departments which carried on the action of the Government in the country. The object of the delegates was that though they themselves had been asked by the same authority as the board had been to give the Government their opinion in the matter, they thought it desirable that they should not be considered as occupying a position of independence, or as acting apart from the board.

Mr. DRESSER ROGERS said the deputation waited upon the board in consequence of a resolution passed by the delegates at a meeting held that morning, Dr. Brewer in the chair.

The CHAIRMAN said he understood that the deputation had no special views to state on the subject of the gas question, but attended simply to ask the board to postpone coming to a decision thereon until the delegates had an opportunity to meet again and consider whether they should be prepared to offer any suggestions to the board.

Mr. DRESSER ROGERS said that was so.

The deputation then withdrew.

At a later period of the day, the report of the committee of the whole board on the supply of gas to the metropolis was brought up.

Mr. NEWTON said, with regard to this report, he was very much afraid that at that late hour, and with so small an attendance of members, they would not be able satisfactorily to get through the consideration of it, looking to its importance, and the vastness of the interests involved in it. Indeed, having looked through the report himself, he was inclined to think the better way would be to adjourn the discussion till the next meeting, making it the first business of the day; and, meanwhile, print and circulate the report among the members. He moved a resolution to that effect.

Mr. FREEMAN seconded the motion.

Mr. COLLINSON gave notice that on the consideration of the report he would move, as an amendment to the second paragraph in the recommendations, that the maximum price of gas be fixed at 3s., instead of 3s. 6d. per 1000.

Mr. RICHARDSON said he also should move an amendment, to the effect that any new capital created by the metropolitan gas companies should be limited to a dividend of 5 per cent. per annum upon the amount actually paid up. He asked whether the delay for another week would be prejudicial, or whether, in the case of a Government bill of this class, a different course was taken in the House of Commons with reference to the deposit by a certain day.

Mr. NEWTON said he had been a little alarmed on the point, but, upon inquiry, found that no harm would arise from the delay.

The CHAIRMAN said the bill would come before Parliament as a hybrid bill.

The motion for adjourning the consideration of the report was put, and agreed to, and the clerk was directed to inform the delegates thereof.

FRIDAY, DEC. 21.

The first business on the *agenda* to-day was the consideration of the report from the committtee of the whole board on the supply of gas to the metropolis, which was presented on the 14th inst.

The report is in the following terms:—

Your committee have to report that they have proceeded on the resolution of your honourable board of the 16th ultimo (No. 2), referring to them, for consideration, the whole subject of the supply of gas to the metropolis. It will be in the recollection of the board that the subject was referred to your committee, on the occasion of the chairman informing the board of the particulars of an interview he had had with Sir Stafford Northcote, President of the Board of Trade, relative to the introduction by the Government of a bill, in the ensuing session of Parliament, with reference to the subject. Your committee, impressed with the great importance of the question referred to them, have given to it earnest and careful consideration, and have, in the first place, directed their attention to the working of the Metropolis Gas Act of 1860, which is now in force, and which regulates the supply and quality of the gas provided by the companies to the metropolis. This Act, which was intended as a protection to the public and the consumers of gas, rendered necessary by the greatly increased powers and facilities which were at the same time granted to the gas companies, has been, so far as the public and consumers are concerned, found to be almost wholly inoperative, while, as regards the companies, it has had the effect of considerably increasing the revenue derived from their property, and, consequently, of raising its value. This has been, for some time, very strongly felt by the public, and is entirely confirmed by the evidence produced to the select committee of the House of Commons, appointed during the last session, on the London (City) Corporation Gas, &c., Bills, and who were also instructed to inquire into the operation and results of the Act now in force. This evidence, together with the report of the select committee, your committee have had before them; and also a return or statement presented to Parliament during last session, and ordered to be printed, stating, amongst other things, the amount of fixed capital invested by each gas company, and the rate per cent. of dividend paid to the shareholders. A copy of this return has, by direction of your committee, been sent to each member of the board. Your committee have also had before them information obtained from the corporations and local boards of various cities and towns of the United Kingdom, relative to the manufacture and supply of gas at those places, and other returns and statements relating to the subject, which they have caused to be prepared, and which they now beg to submit for the information of the board. In order to enable your committee to offer some definite expression of opinion to the board, as to the course which it would be advisable to take with regard to this question, in the interest of the ratepayers of the metropolis, it appeared desirable to ascertain the views of the Government as to the powers which should be given, and the provisions of the bill which they intended to introduce into Parliament next session. They accordingly requested the chairman to seek an interview with the President of the Board of Trade on the subject, which he did, and Sir Stafford Northcote requested that the board would communicate to him their opinion on each of the following courses—viz., the establishment of a strict system of supervision and control of the manufacture and supply of gas by the companies; or, the terms upon which authority should be given to the board to purchase the properties of the companies; so that, whichever of these two courses the Government decided to adopt, they might be acquainted beforehand with the views of the board, and the conditions on which they would be prepared to accept the duty to be cast upon them. Your committee, in accordance with Sir Stafford Northcote's request, have turned their attention to both these alternative plans. First, with regard to the establishment of a more efficient system of supervision and control. Your committee have gone very fully into the evidence given before the select committee of the House of Commons last session on the City Corporation Gas Bill, and have considered their report. The select committee examined witnesses from many large towns, in addition to the metropolis, in various parts of the Kingdom—viz., Manchester, Edinburgh, Birmingham, Walsall, Plymouth, Brighton, &c.; and the evidence given by those witnesses conclusively proves, in the opinion of your committee, that the gas supplied to those places is of greater illuminating power and better quality than that supplied to the metropolis, and that the price is cheaper to the consumers. The illuminating power of the gas supplied to the towns above referred to varies from 14 sperm candles to 30 candles, whereas the power in London is, by the Metropolis Gas Act of 1860, fixed at 12 candles for common gas, and 20 for cannel gas. It is also proved that the purification of the gas in the metropolis is imperfect, and that an excess of sulphur remains, which is highly injurious to pictures, leather, metals, &c. Since the passing of the Act of 1860 above mentioned, the price of gas to consumers has, until recently, been increased, whilst the power of light has been less, and the quality of the article worse. Your committee are strongly of opinion that this state of things is one which calls for immediate alteration and improvement, and they think it hardly creditable that the gas supplied to the metropolis should be inferior, in any respect, to that supplied to provincial towns. It appears evident that the Act of 1860, in its operation and results, while of great advantage to the gas companies, in causing a large increase in their dividends, and in the market value of their shares, has been of little or no benefit to the consumers; and your committee think the time has arrived for the establishment, in the interest of the public, of a more thorough system of control and supervision of the companies. Your committee have given the fullest consideration to the conditions on which such control should, in their opinion, be undertaken by the board, and, in determining the maximum price at which it is desirable that gas should in future be supplied, and the illuminating power and purity to be required, have had regard both to the price, power, and purity of the gas in other places, and to the different conditions, with regard both to manufacture and supply, which prevail in the metropolis. With regard to the first alternative, therefore—viz., that of supervision and control—they beg to submit the following as the conclusions at which they have arrived, viz.:—

That, in the event of the Government deciding to introduce a bill into Parliament for the purpose of establishing a more efficient control of the existing gas companies of the metropolis, and of vesting such control in the board, the conditions of such control should be as follows, viz:—

That the maximum price of gas be fixed at 3s. 6d. per 1000 cubic feet.

That the illuminating power be equal to 18 sperm candles.

That the gas supplied be of such purity as not to discolour turmeric paper, or paper imbued with acetate of lead, when such paper is exposed to a current of gas issuing for one minute from an orifice one quarter of an inch in diameter, at a pressure of not less than half an inch of water.

That the gas supplied do not contain more than 16 grains of sulphur, in any form, in 100 cubic feet of gas.

That a chemical board of three members be appointed, from time to time, for the metropolis, at the expense of the gas companies, by the Metropolitan Board of Works, to regulate the analysis of the purity and illuminating power of all gas supplied to consumers by the different gas companies, with power to fix the mode and places for testing the gas, such chemical board to report to the Metropolitan Board of Works.

That every gas company do, within its own district, and at its own cost, provide and maintain, in a convenient situation, at a distance of not less than 1000 yards from the works, a testing place, and all proper materials, apparatus, machinery, and instruments, for testing the illuminating power and purity of the gas by the public officer, and that such testing place be under the control and management of the board.

That the gas company be at liberty to send an officer to be present at the testing by the public officer, but not to interfere in such testing.

That each gas company have a separate testing place in the same building, under its own control, so as to be enabled to test the same gas at the same time. That public officers, for the purpose of testing the illuminating power and purity of gas, be appointed by the board, one for each district.

That such officers be authorized to test continuously, and report the result, daily, to the board; that every testing be registered, and not the average only.

That a chief gas analyst be appointed by the board to direct the operations of the testing officers; to receive daily reports, and submit and report on them, weekly, to the board.

That, if any complaint be made by the company as to the testing, there be an appeal to the chief analyst, whose decision should be final.

That the weekly report, if unchallenged, be conclusive as to the experiments made.

That the expenses incident to the appointment of such public officers be paid by the board.

That a public auditor be appointed by the board to examine the accounts of all the companies, independently of their own auditors.

With regard to the second alternative—viz., that of the board purchasing the properties of the several gas companies—your committee have deliberated as to the terms on which—having regard to the vested interests of the companies, as well as to the interests of the metropolitan ratepayers—it would be fair that the properties of the companies should be purchased. It appears, from the information laid before your committee, that all the gas companies of the metropolis are, at the present time, paying dividends of 10 per cent. on their ordinary share capitals, and several of them are, in addition, paying back dividends, which they were authorized to do by the Act of 1860. The present market value of their shares averages from 30 to 40 per cent. premium. Your committee are of opinion that the best and most convenient mode of purchase would be by the creation of bonds of £100 each, bearing a certain rate of interest, to be issued to the shareholders in proportion to the amount of capital held by them. In fixing the annual amount per cent. of share capital to be paid to the proprietors, regard must be had to the uncertain nature of their present security as compared with the security offered by bonds issued by the board. Taking into consideration the present market price of the gas companies shares, and the value that would attach to the board's securities in the market, your committee are of opinion that the terms of purchase should be on the basis of a fixed charge, not in any case to exceed 6 per cent. on the present paid-up ordinary capital of the companies, the holders of which are now entitled to, and in receipt of, a dividend of 10 per cent. With regard to the alternative of purchase, therefore, your committee beg to submit the following as the conclusion at which they have arrived, viz.:—

That, in the event of the Government deciding to introduce a bill into Parliament for giving the board authority to purchase the properties of the several gas companies of the metropolis, the amount to be paid for such purpose should not, in any case, exceed a fixed charge of 6 per cent. on the present paid-up ordinary capital of the companies, the holders of which are now entitled to, and in receipt of, a dividend of 10 per cent., and that the board should also have such powers as may be necessary for redemption.

Your committee beg further to express their unanimous opinion that, in the event of purchase being decided on by the Government, the board should make it a condition that the terms of purchase should be fixed by Parliament, and embodied in the Act to be passed for that purpose.

All which your committee beg to submit. (Signed) J. THWAITES.
W. NEWTON.
W. H. DALTON.
CYRUS LEGG.

Major LYON said he desired, before entering upon a discussion of the report, to be informed whether, in any communication which had taken place with the Government, the board had been asked, supposing a bill were introduced with that object, they considered themselves able, and also whether they were willing, to take upon their shoulders the administration of the gas supply of the metropolis. He remembered that on a former occasion, when a bill was brought before Parliament giving the board some fresh duty to perform, it turned out that they had never been consulted on the subject. It was desirable, therefore, that it should be clearly understood whether they had expressed any willingness to undertake this work, and also, whether, supposing it to be proposed, they would be able to do so as the board was at present constituted.

The CHAIRMAN said the two questions put to them by the Government, and to which answers were requested, were these—First, what kind of control, in the judgment of the board, it was necessary to exercise over the gas companies, for the protection of the consumers and of the public; and, secondly, supposing the principle to be recognized by the Government which was recommended by the select committee of the House of Commons last session—viz., that the several gas-works of the metropolis should be transferred to this board—what, in the opinion of the board, was the amount to be paid for such purchase.

Major LYON thought that these inquiries involved the very consideration to which he had alluded—viz., the willingness and ability of the board to undertake the administration of the gas supply of the metropolis. He observed that in the notices given by the Government it was proposed that the Commissioners of Sewers in the City of London, and this board in the other parts of the metropolis, should be the parties authorized to acquire the works of the several companies. This raised the whole question of their willingness and ability, and the board ought really to discuss this before deciding upon the recommendations of the committee.

The CHAIRMAN: We are going to discuss the whole question.

Major LYON: But this one point we ought to decide first—whether we are able and willing.

The CHAIRMAN: We are going to discuss both.

Mr. NEWTON, in rising to move the adoption of the report, said he had no doubt the question put by the gallant major would receive a satisfactory answer in the course of the present discussion. The subject of the supply of gas to the metropolis was one of great interest to the ratepayers at large as well as to the gas companies, and one which had received considerable attention at the hands of the committee to whom it was referred. The select committee of the House of Commons appointed last session to inquire into the bill promoted by the corporation of the City of London, made a report, in which they condemned the existing state of things, and shadowed forth some changes, which it was then thought the Government would be compelled to recognize in the coming session of Parliament. That had turned out to be as predicted, for the Government had felt the pressure so great upon them that they had, out of deference to the various representations made to them, chiefly on the part of the ratepayers and consumers of gas in the metropolis, given the notice to which the gallant major had alluded. Now, that notice it would be seen, if carefully looked at, comprehended entirely the whole of the points embraced in the report of the select committee of the House of Commons. He believed the reason for that was to be found in the fact that the matter came very hurriedly before the Government. They had not been long in office when the representations made to them on behalf of the public came upon them so strongly that, not having had time to make up their minds what precise course it would be wise to adopt, they deemed it advisable to embrace in the notice of their bill all the suggestions thrown out by the select committee in their report, so as to be able hereafter, when framing their bill, to adopt whichever, according to their judgment upon the information they acquired, appeared the most desirable. He thought he should be representing the real feeling of the Government when he said that, even at the

present time, they had not made up their minds definitively what the character of their bill should be. To enable them to form a correct opinion upon the subject, they had submitted to this board, and they had submitted to other bodies, certain questions which they wished to have answered. The two questions which the board were asked they had replied to in the report now presented, and it would be seen that the committee in framing those answers had done so in a way to avoid committing the board to a recommendation as to which of the two courses suggested should be adopted. For his own part he thought the committee had arrived at a very judicious and wise conclusion as to the manner in which they would address the Government on the question. No doubt there was a diversity of opinion amongst the members of the board as to whether it would be better to purchase the works of the gas companies, or to have those companies under the control of the board. But there was this danger, even if the board were unanimous in saying that there should be a purchase of the interests of the whole of these companies, that the board would be chargeable with seeking to aggrandize themselves, and to obtain greater power than they were able to wield. Possibly they would have a repetition of the charge already made, that the extravagant notions of the board made them anxious to get everything into their own hands. The committee were desirous to avoid that, and sought rather to throw the whole *onus* of responsibility in deciding upon the principle of legislation on the Government. Each of the alternative plans, therefore, was prefaced with an "if"—each threw upon the Government the responsibility of deciding which would be the better course to adopt. He need not tell the board, for no doubt all the members had seen it stated in the newspapers, that the gas companies had already made strong representations to the Government on the subject. They had been up as a deputation to the Home Secretary, who was accompanied by Sir Stafford Northcote, the President of the Board of Trade, and through Mr. Baxter they had represented to the Government their indisposition to part with their property in the way suggested by the select committee last session, and proposed in the notice given of the proposed bill. They had represented so strongly their views on this question that one was led to believe, notwithstanding the threatened invasion of their property, they were still very anxious to retain possession of it. On the other hand, there were the consumers and ratepayers of the metropolis, who were very desirous of a change in the existing state of things. It would be seen from a document placed in the hands of the members that morning—a document which emanated from the delegates representing different parts of the metropolis—that there was a general dissatisfaction with the manner in which the gas was supplied to the inhabitants. Well, then, seeing this dissatisfaction on the one hand, and that the companies were very anxious to retain possession of their property on the other hand, the question which seemed most worthy of the consideration of the board was what degree of control ought to accompany the monopoly which the companies had in the supply of gas. That monopoly seemed to be a settled and fixed thing; it seemed to have been recognized by the select committee which sat upon the City Gas Bill last session, for they stated that, under all the circumstances, the districting arrangements were the best, and he (Mr. Newton) was quite sure that this board would have no desire to upset that districting system, because the effect of so doing would be to create such havoc in the public streets—already too much interfered with—as to render them almost impassable. Well, then, monopoly seemed almost inevitable in the supply of gas, and, if such were the case, and the companies were to retain possession of that exclusive right, it remained to be seen how that monopoly should be guarded and controlled. In this matter the whole principle of trade was subverted, because the benefit of competition was denied; therefore it was for the Legislature to protect the consumers against any extraordinary or extravagant charge which might be made upon them by the monopolists. The committee to whom this question was referred, had brought up a series of recommendations which they submitted to the board to-day. The first of these recommendations was that the maximum price of gas should be fixed at 3s. 6d. per 1000 feet. At present as members were aware, the maximum price was 4s. 6d. under the provisions of the Act of 1860, and the companies were entitled to a dividend of 10 per cent. before they were required to make any reduction. But with the price of gas must necessarily be taken the question of illuminating power, because it was not so much buying gas at so much per 1000 cubic feet, as buying light, and they must consider what amount of illuminating power could fairly be obtained at the rate of 3s. 6d. per 1000 feet. It appeared to him that the delegates from the vestries and district boards were, on this point, in full accord with the committee of this board in their recommendations. No doubt this was brought about by the fact that the recommendations of the committee were before the delegates when they came to the resolutions which were now in the hands of the members of the board. In the 40th clause of their suggestions, they stated that in their opinion the maximum price of gas of 15 candles illuminating power should be fixed at 3s. per 1000; of 18 candles illuminating power, 3s. 6d.; and of 25 candles illuminating power, 4s. 6d. per 1000 cubic feet. Now, the committee had fixed upon only one standard, which was nearly semi-distant from the one standard and the other referred to by the delegates—viz., 18 candles illuminating power—which they thought ought to be suppled for 3s. 6d. There was no doubt that 18-candle gas was not a very high standard, but for every practical purpose it was as high as would be required; and he thought there were many advantages to be derived from fixing upon one standard instead of three. Probably, however, even this would be considered by the companies as too high, and they would say they could not afford to supply it at the price proposed. But he would remind the board that in the bill promoted by the corporation last session there was a clause which provided not only that the standard should be 18 candles, but that the maximum price for such gas should be only 3s. per 1000 cubic feet. There were no doubt special reasons why the authorities of the City of London could see their way clear to do that. In the first place, they did not propose to purchase the works of any of the companies; and, secondly, they proposed to light only a district in the centre of the metropolis—the area under their own peculiar jurisdiction, which was a very dense district, having a very large consumption of gas, and requiring only a limited extent of distributing mains, so that no doubt they were favourably situated with regard to the conditions of supply, and might naturally look to obtain it at a cheaper rate than it could be furnished in other parts of the metropolis. The committee, however, were content to adopt the same standard of illuminating power with a maximum price of 3s. 6d. To that the majority of the committee agreed; but he ought to inform the board that some members considered the price should be 3s., and his honourable friend (Mr. Collinson) intended presently to propose an amendment to that effect. He believed that the committee were imbued with this view that they ought not to go to Parliament for the purpose of making the best bargain that was possible, and that, seeing the Government had been good enough to ask the board what they would honestly recommend as fair between the companies and the consumers, they ought not to act upon the principle of asking the most they could in the hope of getting as much as possible. He thought the committee were imbued with the notion that they were bound so to act as, on the one hand, not to recommend what might be regarded as a confiscation of the property of the gas companies, and, on the other, so as to protect, as far as possible, the interests of the consumers and ratepayers of London. He said the ratepayers, because he found that one-ninth of the revenue derived by the gas companies was paid by the ratepayers as such—one-ninth of the rental derived from the supply of gas in London was received from the parishes for the lighting of the public lamps. This was a very important consideration, which must not be lost sight of. Then, in addition to the price and illuminating power, there was the question of purity—a very vexed question before the committee on the metropolis gas supply in 1860, and again before the committee this year. There was undeniable evidence given in the last session of Parliament of the deleterious character of the gas supplied by the companies. It was shown that sulphur existed in the gas to a very considerable degree, especially in the gas of the Great Central Company—to the extent, indeed, of 27 grains per 100 cubic feet, and it was proved that the existence of that sulphur was most damaging to fabrics, and other classes of goods of shopkeepers, and also very deleterious to health—a consideration to which he was sure this board would attach great importance. Now, the present Act of Parliament—the Act of 1860—limited the number of grains of sulphur in any form in 100 cubic feet of gas to 20, and the proposition of the committee was that that standard should be reduced to 16. The reduction from 20 to 16 was not very great, but probably it was as great as could possibly be obtained with gas which was manufactured within any populous district, for, as he had stated to the board before, it was quite impossible to free gas from sulphur unless the manufacturers could use lime as the purifying agent, and it was stated that lime could not be used in any populous place in consequence of its giving rise to so great a nuisance. If the companies in London were to resort to its use, the vestries would be crying out against it, because of the offensive character of the blue billy which resulted from it, and which would stink out the whole neighbourhood. They would never get gas as pure as could be desired until they got the whole of the works removed to a considerable distance from the populous parts of London. It was one of the great features and recommendations, to his mind, of the corporation scheme of last session, that they proposed to erect their works right out of the City—to have them far out in the suburbs, in order that they might be able to purify their gas to the very highest degree without creating a nuisance to any one. If gas-works were to exist in the populated parts of the metropolis, it was as much as they could expect that the amount of sulphur impurities in the gas should be reduced to 16 grains per 100 cubic feet; but he saw in the recommendations of the delegates that they put the amount much lower, and that they wished the companies to be prohibited from continuing their works in London beyond five years from the present time. He did not know what the effect of the recommendations of the committee on this and other points might be, but probably there were some modifications which, in working out the details, would have to be made in the bill that was proposed. To sum up this part of the case, they recommended that in the event of the Government introducing a bill, the maximum price of gas should be fixed at 3s. 6d., that the illuminating power should be 18 candles; that the gas should be of such purity that it will not discolour turmeric paper, or paper imbued with acetate of lead, when such paper is exposed to a current of gas issuing for one minute from an orifice ¼-inch in diameter, at a pressure of not less than ½-inch of water; and that the gas supplied do not contain more than 16 grains of sulphur in any form in 100 cubic feet of gas. These were the conditions which they proposed should form the basis of the controlling power should the Government introduce a bill into Parliament for the purpose of securing a more efficient and satisfactory supply of gas. It was quite necessary that that control should be efficient, and he thought the recommendations of the committee would establish such a control. Then they proposed that there should be a chemical board and other arrangements to test the illuminating power, pressure, purity, and distribution of the gas; and in this they were mainly following the recommendations of the select committee of the House of Commons last session. He had no doubt that this control would be more efficient than any heretofore established, and that the consumers would be ensured by these means a better and much purer supply of gas than had been furnished by the companies. These were the recommendations of the committee on the first point, but as the Government had asked the board to state what principle should be recognized in the event of Parliament giving power to the board to purchase the works of the several gas companies, the committee proceeded to state their views upon this subject. In the consideration of this subject they had to take into account the present profits derivable from the manufacture of gas. They found that the amount of capital invested in these undertakings was between £6,000,000 and £7,000,000 sterling; but that capital assumed various forms. The great bulk of it—all except some £700,000 or £800,000—was ordinary capital, upon which the companies were entitled to 10 per cent. if they could earn it, and the committee had to consider what an earned or speculative profit of 10 per cent. was worth in comparison with well-secured bonds issued by this board. Having considered the question, they said this—that the 10 per cent. to which the companies were entitled if they earned it was not more than equal to 6 per cent. guaranteed by the board—*i.e.*, guaranteed upon the whole of the gas-works which would be transferred, guaranteed upon the whole of the gas-rental received, and guaranteed further by the whole of the rates of the metropolis. Then they said that if £100 gas stock was at this moment worth £150 in the market, it would be equivalent to a bond for that amount at 4 per cent. per annum interest, which would give to each holder of £100 of stock 6 per cent. in lieu of 10 per cent. And he thought the board would be of opinion that if that £150 bond at 4 per cent. were taken into the market in the City, it would be worth as much, if not more money than the shares of the companies at the present time. In corroboration of the view taken by the committee, he would read the answer given by Mr. Baxter to a question (No. 5097) put to him when under examination before the select committee last session. The question was put by Alderman Lusk, "Do you think 10 per cent. is a fair dividend where a man has a monopoly?" The answer was, "It is a fair price when a man has to go into an adventure. If you guarantee me 6 per cent., I will be very thankful for it; but if I incur any risks, I ought to have the chance of making a larger profit." So that Mr. Baxter himself gave evidence on behalf of the companies to show that a secured 6 per cent. was equal to an adventurous 10 per cent. He said, "If you will give me a secure 6 per cent. for my speculative 10 per cent., I will be very thankful." That was precisely the proposition the committee made, and which, if the gas companies were truthful in the evidence given before the select committee of the

House of Commons, it was quite certain they could make no complaint about. But the board would observe they threw upon the Government the entire responsibility of deciding what should be done. They said, "In the event of the Government deciding to introduce a bill into Parliament for the purpose of establishing a more efficient control of the existing gas companies of the metropolis, and of vesting such control in the board, the committee are of opinion that the conditions of such control should be as follows." But then they added, that "In the event of the Government deciding to introduce a bill into Parliament for giving the board authority to purchase the properties of the several gas companies of the metropolis, the committee are of opinion that the amount to be paid for such purpose should not in any case exceed a fixed charge of 6 per cent. on the present paid-up ordinary capital of the companies, the holders of which are now entitled to, and in receipt of, a dividend of 10 per cent., and that the board do also have such powers as may be necessary for redemption." And they did this because they believed the board would thoroughly object to have any transfer of these works to them, unless it would enable them to do full justice to the ratepayers, and unless at the same time they could earn for the public in return for the security they offered and the trouble they took, something, as in the case of Manchester and other places, which might be devoted to the improvement of the metropolis.

The CHAIRMAN: The price would be fixed in the Act.

Mr. NEWTON: Precisely. It was intended that the price at which the works were transferred should be stated in the Act. The committee were very strong on that point. They would not have any negotiations with the companies as to the price—no references to juries or arbitrators by which the value would be run up to a fabulous amount. If anything were done it must be upon a price fixed by the Act, and regulated by the amount of income derived from the property. He might say incidentally that about £800,000 of the capital invested in these companies was of a different kind to the rest. Some of it was capitalized profits, which was only entitled to 4 per cent.; and some of it was new capital, created since the Act of 1860, on which Lord Redesdale had reduced the dividend as low as 7½, and even 7 per cent. This capital, of course, would not receive 6 per cent. in exchange, but would be calculated with reference to the 6 per cent. as fairly representing the 10 per cent.—not exactly, perhaps, a *pro ratâ* charge, but taking that as the basis of the calculation. The two places which appeared to him to assimilate, in some respects, nearest to London were Edinburgh and Plymouth. At Edinburgh the price of coal (which, though not much of an element in the consideration, was still an element) was 17s. 2½d. per ton, the company were entitled to a 10 per cent. dividend, and the price of gas there was 3s. 9d. in the city and 4s. 7d. in the outlying districts. The Plymouth and Stonehouse Gas Company paid for coal, in 1865, 16s. 3d. per ton, they were entitled to a 10 per cent. dividend upon part of their capital and 7½ per cent. upon the rest, and they supplied gas at 2s. 9d. He did really think if these two companies, existing in places where coal was as dear as in the City of London, and where other circumstances were not so favourable as in such a densely populated and large consuming district, could supply gas at these prices, the conditions placed before the board by the committee might well be conformed to by the metropolitan companies, and that, in adopting them, the board could not be accused of any desire to confiscate their property.

Mr. DALTON seconded the motion.

Mr. COLLINSON, in accordance with notice given, moved, as an amendment to a portion of the recommendations of the committee—"That this board are of opinion that the maximum price of gas should be fixed at 3s. per 1000 cubic feet." He might say generally that he approved of the report of the committee; but, looking at the Blue Book which had been supplied to the members, containing the proceedings before the select committee last session, he thought they were not altogether standing up for the interests of the public at large as they ought to do. He could not conceal from himself the fact that the public had been very badly used by the gas companies during the last six years, for though the Act of 1860 prescribed the quality of the gas to be supplied, it was well known that the companies had never supplied gas of that quality. At Birmingham, Manchester, Halifax, Carlisle, and other places, gas was supplied at considerably lower prices than it was furnished to the consumers in London, and he did not think the committee were doing sufficient justice to the ratepayers unless they asked that they should be placed on as favourable terms as those upon which gas was sold in the provinces. Let them look at Manchester. There gas was sold at 3s. per 1000 cubic feet of an illuminating power of 22 candles. The committee only asked for 18, and they proposed that the maximum price should be fixed at 3s. 6d. He thought 3s. would be amply sufficient for 18-candle gas. It should be borne in mind that in Manchester they not only paid 10 per cent. dividends while supplying gas of a higher illuminating power at a lower price, but they were able to appropriate £25,000 a year to the improvements of the place. When he looked at that fact, he could not think it was right that the London companies should have the power to realize so much as they had done during the last five years, taking it all out of the ratepayers pockets. At Birmingham, they supplied 22-candle gas at 3s. and 2s. 9d.; Carlisle, at 2s. 10d.; and therefore he thought the board would not be doing justice to those whom they represented, unless they demanded that the maximum price be fixed at 3s. Another ground for saying so was the fact that at the present moment there were two metropolitan companies supplying gas at 3s. 4d., not as the result of competition or of any pressure put upon them; but while paying their shareholders 10 per cent., of their own accord they had reduced the price to 3s. 4d.; and therefore if the existing monopoly was to be secured to the companies by any further legislation, provision ought to be made for securing the consumers against a higher maximum price than 3s.

Mr. HEALEY seconded the amendment.

Mr. PHILLIPS brought up a series of resolutions from the Strand District Board of Works, which were read by the clerk at the table, as follows:—

At a meeting of the Board of Works for the Strand district, held on Wednesday, December 19, 1866—present Mr. Henry Roberts, in the chair, and 22 members—it was resolved as follows:—That the present arrangement of the various gas companies, as sanctioned by the Legislature, has created a monopoly highly injurious to the public, as well as to the private consumers of gas.

That since the passing of the Act of 1860 the metropolis has been divided into districts by the gas companies, and while all competition has been thus done away with, the public have not been provided with a supply of pure gas, but, on the contrary, the illuminating power of the gas is very inferior, and the price to the consumers is very much higher in the metropolis than in many of the provincial towns, where the local authorities provide the supply.

That this board, therefore, petition the Board of Trade that steps may be taken during the next session of Parliament to repeal the present gas Acts, and to provide for a good supply of pure gas to the public.

That copies of the foregoing resolutions be sent to the Metropolitan Board of Works, and to the several boards of works and vestries of the metropolis.

Mr. RICHARDSON desired to say a few words upon the amendment. It appeared to him that if the board recommended a 3s. maximum they would necessarily be bound to provide gas at that price themselves if the right to purchase the existing works were given to them. Therefore they would be taking a step that would be most destructive of any advantage they might hope to derive for the ratepayers by taking the management of these works into their own hands. He thought there might be a difference of opinion amongst them as to the policy of their undertaking the management of the gas-works of the metropolis, but he did hope that if they arrived at the determination to do so they would have regard to the interests of the ratepayers. But if there was one course more than another calculated to destroy that prospect, it was to recommend the Government to limit the price to 3s. He earnestly hoped, therefore, that the board would never give their sanction to such a recommendation. On the subject of the report in its integrity, there were one or two remarks which seemed to him to be necessary, especially since he had seen the resolutions of the delegates. The question put before the board contained two alternative propositions, and the point to be decided was, would they recommend this or that?

The CHAIRMAN said that was not so. The question was—if the Government elected to bring in a bill giving the control over the companies to the board, what view did they entertain as to the principle upon which that control should be based? or on the other hand, if the Government proposed to enact the principle of purchase, what view did the board entertain on that point?

Mr. RICHARDSON: It is to a certain extent alternative, and was so put before us.

Mr. TURNER: No; they are two distinct questions.

Mr. RICHARDSON: The proper course for the board to adopt would be that which the delegates propose—viz., recommend the Government to embrace both.

Mr. NEWTON: I said the committee did not recommend anything of themselves for fear of being charged with a desire to get too much power into their hands.

Mr. RICHARDSON said it was a fair matter for discussion whether both of these propositions should not be urged upon the Government as recommended by the delegates. The importance of the remark he first made seemed to him to be this—that in the one case they were recommending the Government to adopt a course which involved the purchase of the interests of the companies who were getting 10 per cent. on the manufacture of gas, while at the same time they were complaining that at present the purity of the gas was not sufficient, that the price ought to be lower, and the illuminating power increased. Consequently, they recommended the Government to introduce a course of legislation which would very materially tend to deprive the companies of the large profits they were now making, so as to prevent them from paying 10 per cent.; while, on the other hand, the board would be required to purchase the interests of the companies on the basis of 10 per cent. His opinion was that they ought to confine themselves solely to the recommendation to purchase the works and to supply gas to the metropolis. It seemed to him that, if the Legislature should see fit to limit the companies to the price recommended, the value of gas stock, instead of being £150, would not be worth par—they could not get 20s. in the pound for it, and yet the board would be saddling themselves, under those circumstances, with the purchase of works, and the obligation to carry on a trading operation which, in all probability—especially if they adopted the amendment—would result in a loss. He was strongly in favour of purchasing the interests of the companies; he wanted to see the whole manufacture of gas in the hands of the board, because he believed they could so conduct it as to create a large revenue for the purposes of the metropolis; but he was afraid that if they bound themselves to a maximum price for gas on the one hand, with an increased illuminating power, and, consequently, increased expenditure; while, on the other, they proposed to purchase upon the basis of the present condition of the companies, they would be, as it were, burning both ends of the candle.

The CHAIRMAN: No, we do not. If we control, we control; if we purchase, we purchase, and all these matters will be in our own hands.

A MEMBER: Supposing we do both?

Mr. RICHARDSON said the only course was to do both, and there was no question it would come to that. The course of legislation would be a reduction of price, an increase of quality, and powers to purchase. But it appeared to him that if they limited themselves to a maximum price, and had to purchase upon the existing state of things, they would be fixing a burden upon themselves which hereafter they would be glad enough to get rid of. It was therefore desirable that this question should go back to the committee for further consideration; it was hardly yet ripe for further discussion in the board. They ought to know a little more about matters than they did at present. With reference to the report of the committee, he saw that they recommended the appointment of public officers in each district, to be paid by the board. He would like to know what the expense of that would be.

Mr. NEWTON: It does not mean a different officer for each district.

Mr. RICHARDSON: It is so stated.

Mr. NEWTON: What it really means is that there should be a public officer who would test the gas in every district.

Mr. RICHARDSON: The report says one for each district. Now I suppose these officers will be men of ability, and they will be permanently employed by the board. There is to be a continuous testing, and daily reports. I take it that such officers for such duties would require a large amount of pay. Then, too, there is to be a chief gas analyst, and a public auditor. All this will entail a large expense upon the board, so that I hope our friend, in replying, will give us a little further information on this point. However, I confine myself now to the recommendations in the report, and I say again, anxious as I am to see these recommendations carried out, I am afraid that by fixing the purchase money on the one hand, while on the other we are reducing the maximum price of gas, thus reducing the income, and at the same time increasing the quality and thus increasing the expenditure, we shall be entailing upon ourselves a burden which hereafter we shall be very thankful to get rid of.

Mr. SHAW said in the first recommendation, that there should be a strict control over the gas companies, he quite agreed, for he believed London was supplied with the worst gas of any place in England, and at the highest price. He believed, also, that money had been expended by the companies for the extension of their works out of profits, for which they ought to have raised fresh capital. There was, therefore, no question in his mind that a very strict and competent control should be placed over them. But it seemed to him that they were wrong in fixing the illuminating power of the gas at 18 candles. They could not obtain that from common coal, it could only be done by the use of cannel, and the cannel-field being very limited he doubted whether they could secure 18-candle gas at the price named. But when he came to the second point, which suggested that this board should descend from the position it now occupied and become a commercial

company for retailing gas to the consumers of London, he felt that if they agreed to that they would be placing themselves in a very wrong character. He doubted very much, even if the board could realize a profit by the supply of gas, it would be a fair mode of taxation, inasmuch as it would fall unequally upon the inhabitants of the metropolis. The large consumers of gas, the mercantile portion of the community, would be contributing a much larger share than many of the richer inhabitants who were only small consumers. He thought, therefore, that under no circumstances should the board undertake the purchase of the interests of the companies, and convert themselves into a commercial establishment for the purpose of supplying gas. They would have to raise six or seven millions of money, and if any accident happened, for there was considerable risk in the matter, they would be placed in a very awkward and unpleasant position. He should be very glad to see a proper and efficient control exercised over the companies; but he did not think, under any circumstances, the board should become the suppliers of gas to the public at large. It would entail a very considerable expense, and large public bodies were not always the most economical. He could see many objections to this course, and therefore he hoped the recommendation would be rejected.

Mr. Carpmael wished to ask the mover of the resolution whether, in fixing the 6 per cent., supposing the companies were required to supply gas of a better quality at a lower price, this 6 per cent. would represent the 10 per cent. they would then get. He assumed that the committee in proposing that the gas companies should hereafter receive 6 per cent. upon the capital now embarked—and which this board, in the event of the Government deciding to give them power to purchase, would have to pay—intended that it should come out of the 10 per cent. that would still be obtained, notwithstanding that the quality of the gas was enhanced, and the cost of production increased. Was it supposed that 10 per cent. would accrue upon the capital, notwithstanding the increased quality and reduced price?

Mr. Freeman said the board would bear in mind that the companies had not only paid 10 per cent., but they had made up deficient back dividends to that amount.

Mr. Brushfield said he felt on this occasion very much like David amongst the Philistines. His own conviction was that they could not make 18-candle gas without the use of cannel, and if they employed cannel in the manufacture they could not supply gas at 3s. 6d. per 1000. With respect to the mode in which the gas question had been treated, it seemed to him as though the committee considered they were not dealing with honest men. The companies were supposed to have taken advantage of their position to secure to themselves profits to which they were not entitled. But if the members of the board would remember that in the early days of gas lighting the companies worked and worked, with little or no remuneration, to perfect and bring into operation a system which it was now admitted was indispensable to the community, they would perhaps take a different view of the matter. With reference to the question of the rate of dividend receivable, he could only say for himself that he should be content with much less than 10 per cent. upon any money that he had invested in gas shares, if he could be secured against the risks to which such property was always exposed. But they must not forget the possibility that with the advance of science they might wake up some fine morning and find a new light in the world—gas itself entirely superseded, and the property of the shareholders utterly valueless. These things, he thought, ought not to be lost sight of, although in speaking upon this question he felt that his observations would be regarded with something of suspicion because of his known connexion with gas companies. Those however who knew him best would know that he never allowed his private interests to interfere with the discharge of public duty, and that he would not advocate a wrong policy for the purpose of supporting the cause of the gas companies. For his own part, he wished that the public might have all the advantages to which they were entitled, and if gas could be supplied at 3s. 6d. or 3s. per 1000, no man in the world would be more delighted than he to see it done. He believed that the company of which he was a director (the Commercial) managed their concerns as well, perhaps even better, than any other company in London, and from his experience he felt persuaded that gas of the quality referred to in the report could not be manufactured at anything like 3s. 6d. per 1000. Mr. Collinson, in moving his amendment, quoted from the Blue-Book to support his theory to the contrary; but it was all a fallacy to suppose that from that Blue-Book they could obtain data for a correct judgment in the matter. The honourable member might as well study "Robinson Crusoe" to know how to make a steamboat. The Blue-Book was also a one-sided affair entirely. The chairman of the select committee did not act fairly towards the companies at all. He said: "We do not want any evidence from you in reply to the other side; we are quite satisfied." The counsel who appeared on behalf of the companies believed that the committee were satisfied that there was nothing in the evidence given against them which required to be disproved, otherwise they had a most complete answer to all that was said and that had been reported in the Blue-Book. The committee only took Mr. Baxter's evidence on some points; on all the others they said, "We do not require you to call witnesses." Surely that was not a fair thing to do if they intended to bring up an adverse report, and he (Mr. Brushfield) did not think this board would be acting fairly towards the gas companies if they came to any conclusion upon the question before them unless they went into a further consideration of the facts of the case. If they did they would have to go before a committee of the House of Commons, and be asked questions upon points on which they knew nothing at all. He asked them only to deal as honestly with the gas companies as they would with any other interest, and therefore he thought the best course would be to send the report back to the committee, that they might take the opinion of men of skill and standing on the subject. If in the result they should come to a conclusion adverse to the gas companies, and should have reason to believe they had been receiving too much, he, for one, should not complain of their decision. He was quite sure the companies only asked for a fair allowance upon the capital invested, but if the propositions contained in the report were carried out, and they were required to make and supply gas at the price mentioned, it would amount simply to a confiscation of their property. He felt that it was not fair and honest towards the companies to deal with this question without further investigation. All these companies were established upon the faith of Acts of Parliament, and money had been invested in them for the benefit of widows and children whose interests could not be ignored. Setting aside, however, these considerations for the moment, let them think what it was proposed by the report to do. It contained alternative propositions; the one that the maximum price of gas should be reduced to 3s. 6d., the other that the board should be authorized to purchase the interests of the companies upon certain terms. The Government might probably say, "We will take you upon your own report, and carry out both propositions." If so, what would the board have bound themselves to do? To supply gas of 18-candle illuminating power at 3s. 6d. per 1000 cubic feet, and to pay the companies 6 per cent. upon the amount of their capital. He believed they would not be able to pay 4 per cent.—in fact, he doubted whether they could make gas of that quality and at that price and pay any dividend at all. Therefore, as he said, the question demanded some further investigation before they came to a conclusion upon the authority of this Blue-Book. As to the remarks made by the delegates, he did not think it was worthy of the board to listen to them. They ought to act with more dignity, and, without allowing their minds to be biassed by statements on either side, well weigh and consider the question, and get all the information they could from persons capable of giving it, so as to make themselves perfectly masters of the subject. Then they would be justified in coming to a conclusion—not till then. Entertaining this opinion, he should, in the event of Mr. Collinson's amendment being lost, move as a further amendment that the report be referred back to the committee for the purpose of enabling them to make a more close investigation, and to take the evidence of persons well able to advise them on the subject.

Mr. Elt desired to offer a few observations on the amendment proposed by Mr. Collinson. In the general tenor of the report of the committee he agreed, but he thought Mr. Richardson had quite misunderstood the question before the board. It seemed to him that the position of the matter was this—the board had been asked by the Government to give their opinion upon two alternative plans, either of which the Government in their wisdom might hereafter submit to the House of Commons, the first being the establishment of a stricter supervision over the gas companies; the second, the policy of authorizing the board to take the works out of the hands of the companies, and themselves to manufacture gas for the metropolis. Now, if the first plan were adopted by the Government, the board would at present have nothing at all to do with the other. The plan of supervision would be tested by time, and probably at the end of six or seven years the public, being still dissatisfied with the arrangements for the gas supply of the metropolis, would agitate to get the board to take the manufacture into their hands entirely. When that time arrived it would be perfectly consistent that the board should not abide by the present recommendations as to the terms of purchasing the interests of the gas companies, but should adopt another scheme, based upon the order of things which might then exist. He had not the least doubt that if a stricter supervision were established by the Government, and if the recommendations of the report of the committee that the maximum price of gas should be reduced from 4s. 6d. to 3s. 6d., and the purity and illuminating power increased, were enforced, in a very few years instead of the gas companies being able to pay 10 per cent. they would not be able to pay 5 per cent., nor 4 per cent., and probably not even 3. Now, if this board wished to have any of their recommendations adopted by the Government, they must see to it that those recommendations were founded in justice and equity and fairness. But to propose for one moment that gas of 18-candle illuminating power should be supplied in London at 3s. 6d. per 1000, was perfectly monstrous. Reference had been made to the provinces, and the names of several towns had been mentioned, where in some the gas-works were managed by the corporations, and in others by companies. But, upon looking over the published returns, he found very few instances in which gas was supplied to the public at less than 3s. 6d. Reference had been made to Manchester as the model town. Now, what was case at Manchester? The average price of gas there was 3s. 3d. per 1000. Certainly they used cannel coal in its manufacture; but then it must be remembered that Manchester was within 24 miles of the cannel coal-field, so that they had a great advantage over London. But he might tell the members of the board that, with all that had been said upon the subject, there had been an agitation continually going on upon the gas question in Manchester for the last 30 or 40 years. The gas-works at Manchester had been in the hands of the corporation or of commissioners ever since 1824, and there had never been competition in the place; and yet such had been the feeling of the consumers against the appropriation of the gas profits to the public improvements of the town, that there had been an agitation continually going on in reference to it. Alderman Shuttleworth was for a considerable time the chairman of the gas committee there, and during ten years the price of gas was brought down from 10s. 6d. to 5s. 9d., yet because (there being a large profit even then) he wished the Town Council to appropriate more money to the town improvements than the gas consumers thought right—for if the money is appropriated in that way the gas consumers pay a larger share in proportion towards those improvements, than other inhabitants—at the end of that time, after all his services, Alderman Shuttleworth was ejected from the Town Council, and lost all further control over the gas supply. The neighbouring town of Liverpool might perhaps be taken with Manchester in considering what ought to be done in this matter. At Liverpool the gas-works were in the hands of a private company, and yet Liverpool had all along been supplied with gas at a cheaper rate than Manchester. The Liverpool Company at the present time supplied gas cheaper than the Manchester Corporation. But the question now before the board was Mr. Collinson's amendment, that in London the maximum price should be fixed at 3s., and not at 3s. 6d. As he had said already, reference had been made to several places in the country, but there were very few indeed where gas was supplied at a cheaper rate, taking all the circumstances into consideration. Take the case of Birmingham. There gas was supplied at prices ranging from 2s. 6d. to 3s. 4d. But Birmingham had peculiar advantages; the coal-fields were close at hand, the company had their works at the collieries, and the gas was conveyed from there, when made, into the town. There was also a very large consumption, and a considerable demand for residual products. The gas supplied was not cannel gas, and the company charged from 2s. 6d. to 3s. 4d. per 1000. The committee proposed that the price in London should be 3s. 6d., although the price of coals in Birmingham was quite nominal to what it was here—viz., 11s. 10d. per ton.

Mr. Newton asked what coke fetched at Birmingham.

Mr. Elt said he was not prepared to state, but he knew that the other residual products realized as high a price as those in London. The next place he would mention was Derby, where the price of gas ranged from 2s. 11d. to 3s. 5d. That town also was near the coal-fields, and the coal used in the manufacture of gas cost only 9s. 8d. per ton. Reference had been made to Plymouth, but he felt convinced there must be a mistake as to the price of gas there being only 2s. 9d., for there the price of coal was 16s. 3d., and in Devonport, the adjoining town, where coal cost 16s. 6d., the price of gas was 4s. He was, therefore, strongly of opinion that the 2s. 9d. was a misprint for 3s. 9d., but he had not been able to write to Plymouth to ascertain the fact. These which he had cited were the only instances in which gas was supplied in the provinces at prices under 3s. 6d., and these were all cases where the gas was manufactured by private companies, and where there was the great advantage (except in the case of Plymouth) of being near the coal-field, so that coal was supplied at a very cheap rate.

Now he came to a few corporation gas-works, and he found that he could only pick out eight places all over England in which the gas-works had been taken in hand by corporations. Some of these transfers were of very recent date. And how many of these corporations supplied gas under the rate of 3s. 6d.? Carlisle, 3s., in close proximity to the collieries, and where the price of coal was 10s. 1d.; Manchester, 3s. to 3s. 2d.; and Oldham, 3s. 4d. to 3s. 8d. The other corporation gas-works were Birkenhead, where the price was 5s. to 5s. 6d.; Halifax, a large town with a considerable consumption, and coals at 11s. per ton, 4s.; and Stockport, 3s. 6d. He did not find that there were half a dozen places all over Great Britain where gas was supplied, whether by a company or a corporation, under 3s. 6d. It had been already said, and he thought truly so, that it would be impossible in London for the companies to supply at 3s. 6d., if the gas was to have an illuminating power of 18 candles, because such gas must be made by the use of a large per centage of cannel coal. If the demand for cannel increased, as in such a case it must do, the cannel-field being exceedingly limited, the price would go up very considerably. Dr. Letheby indeed had stated that the cannel-field would last only for another 20 years, and Dr. Letheby's evidence, he believed, was very strongly relied on. At all events it was clear that the supply of cannel was very limited in extent, and if, by reason of the increaseed demand, the price rose from 25s. to 35s. per ton, which it would certainly do if the metropolitan companies were compelled to use a large quantity of it, how would it be possible to furnish 18-candle gas at the price of 3s. 6d. per 1000. On this account he for one must certainly vote against the amendment.

Mr. FREEMAN said he did not object to any of the recommendations. Of the alternative plans he rather preferred that of purchasing the various works, and for that reason he did not see why they should burden the ratepayers with a risky capital of some nine millions of money, unless they could see their way clearly to a profit. Now, in his humble opinion, neither the ratepayers nor the Government would sanction the board raising a revenue by this indirect kind of taxation—the rate payers would call out against it on the one hand, and the Government would not sanction it on the other. Under these circumstances, therefore, he thought it would not be wise of the board to think of purchasing these works. But if the Government should decide that it was desirable they should be invested with such power, then, he thought it was a wise precaution to recommend the purchase upon the terms mentioned in the report. The honourable member opposite (Mr. Brushfield) had told them that though he considered the board were about to confiscate the property of the gas companies, he did not care the snap of his finger about it.

Mr. BRUSHFIELD: I said that, as far as I was concerned personally, I did not care—that I could afford it.

Mr. FREEMAN said he was obliged to confess that he could not practise such self-abnegation—he was not prepared to sacrifice himself or the sake of the public. With regard to the observations of Mr. Richardson, he thought the honourable member had confused the two recommendations. The committee did not put the 3s. 6d. maximum in the recommendation, which they made in the event of the Government proposing that the board should purchase; they simply put it in the one which referred to the board having control over the gas companies. With regard to the position of those companies, it should be remembered that not only had they paid 10 per cent., but many other things, as well as back dividends, out of their profits. If the board required them now to reduce the price of gas, they could not consider themselves very hardly dealt by; and even supposing their dividends were reduced from 10 per cent. to 8 per cent., one's sympathies would not be very deeply touched. In fact, he thought 8 per cent. ought to be considered a very good dividend, so long as they retained the monopoly. Under all the circumstances of the case, he thought the recommendations of the report were very wise, and in making them they were doing what the Government asked them to do, and if they were carried out the result would no doubt be an arrangement perfectly fair and equitable as between the gas companies and the ratepayers and consumers of the metropolis.

Mr. BIDGOOD said he could not help admiring the fairness with which his friend who had just sat down was prepared to deal with the question. He said in effect, "There is no objection to put 3s. 6d. as the maximum price which shall be obtained by the gas companies, but I do altogether object or ignore the proposal to put it in the other recommendation, if we are to be be called upon to purchase the interest of the gas companies. I entirely object to any price at all being named, if that is the case. It will do very well to put in 3s. 6d. if the gas companies are to supply the article; but if we are to supply it, then, if you please, we will have no limit whatever." And why? Because it was well known, notwithstanding the Blue-Book, that gas of 18 candles illuminating power could not be produced to the consumers of the metropolis at anything like that price. They all knew that Blue-Books did frequently contain a great deal of valuable information, but they knew also that Blue-Books were very often concocted for a purpose. Persons who had got some end of their own to serve managed to get themselves squeezed into Blue-Book evidence, and so the whole affair might be regarded as more or less one-sided. And the Blue-Book already referred to in this discussion was, as concerned the gas companies of the metropolis, one of the most fallacious things, as he was informed, that had ever appeared. Now, he begged to tell the board that personally he knew no more of the manufacture of gas than gas knew about him; but, as he was informed, that Blue-Book was an entire delusion and a snare. The gas companies—and he spoke in the presence of gentlemen who perhaps knew the fact better than he did—were entirely thrown off their guard when before the select committee by the courteous way in which they had been treated by the committee; and when they were about to reply to the monstrous assumptions that had been laid down by the witnesses on the other side, and reported in that Blue-Book, they were further thrown off their guard by the chairman telling them—"Really, gentlemen, there is no occasion for you to reply." The courteous way in which they were, he would not say cajoled, because that would be a strong term to use, but misled, so threw them off their guard, that they went out of the committee-room as perfectly assured that the report would be entirely in their favour as ever men went out of a committee-room in their lives. The professional men employed—men of the highest standing, who had been employed and paid thousands of pounds to represent the companies, were entirely, to use a vulgar term, "sold." They never opened their mouths to confute a single fallacy put forward on the other side, and reported in the Blue-Book, because they were told by the chairman of the committee that it was perfectly unnecessary, and they went out as comfortably to eat their mutton chops and drink their champagne without having said a word, as though they had laboured hard and successfully on behalf of the companies by whom they were engaged. This was, as he was told on good authority, the fact about the matter; and never were they more thunderstruck in their lives, nor more annoyed as professional men, than to find themselves entirely tripped up and out of court by the tactics displayed on the other side. On the question before the board, it appeared that Mr. Collinson objected to a 3s. 6d. maximum for 18-candle gas; and all that he (Mr. Bidgood) would say on that point was, that he hoped he might live to see the day when 18-candle gas could be supplied at that price; but he was obliged candidly to confess that he did not believe it would be possible, from the little he knew upon the subject, and for this reason—that he believed the highest illuminating power that could be squeezed out of common coal was 14 candles or thereabouts; and that, if a higher standard was to be laid down, it must be by the addition of cannel coal, at a very much larger price. There was only one cannel gas company in London, although cannel coal was used more or less by others; but if all of them were to be required to use 25 per cent. of cannel to reach the standard of 18 sperm candles, the price of cannel now being very high, and likely to be enhanced because the field was small, it did not require much foresight to discover what must be the consequence. Now, what he wanted was, that the board should wash their hands of any of the bother of the gas question. If to-day furnished them with a sample of the sort of hornet's nest they were getting themselves into by meddling with the matter, he thought, seeing that they had plenty of other work calling for their attention, the sooner they relinquished all idea of it, and left other people to manage it, the better. But there was one thing he desired to see done in the interests of the ratepayers—he wanted to see an income derived by the board on behalf of the public for carrying out street improvements, and he thought that, without meddling with the management of the gas-works at all, but letting the question of the supply regulate itself as between the consumer and the supplier, the companies might in some way be bound down to an obligation that, in return for breaking up the roads, and laying their pipes there, they should pay the board £100,000 a year which should be applicable to street improvements. If the companies were wise, he was afraid they were not—they would sketch out some such scheme, and he thought they might be expected to do so on just and equitable principles. They broke up the streets of the metropolis—they could not carry on their business without doing so; but if they were dependent upon the accommodation which the streets afforded for this purpose, surely there was nothing unfair in asking to share to that extent in their profits. He thought it was a very legitimate source of revenue for the board, and if Parliament would give them authority to do so, he thought it would be far better than meddling with the internal arrangements of the gas companies. If they could not get £100,000 as an income from the gas companies, then, he thought, they had better wash their hands of the matter altogether, and let others take the trouble and reap the profits.

Mr. HEALEY said he should like to make a quotation from the Blue-Book in reply to the remarks of Mr. Elt, though he had no doubt that his friend opposite (Mr. Bidgood) would say it was all a fallacy. But the gentleman whose evidence he was about to quote was an authority in the matter. It was Mr. Heron, the town-clerk of Manchester, who, in reply to a question by Alderman Lusk, said, "While supplying gas at 3s. 1d. we have a profit of £30,000 a year, after paying 1-20th off the mortgage debt, amounting to £18,000 or £19,000, and also paying a large sum to the sinking-fund, which, in my opinion, is quite necessary." Now, Manchester was supplied with cannel gas, and, surely, if there they could supply it at 3s. 1d. per 1000, the consumers of London ought to get the 18-candle gas referred to in the report for something like a similar sum. Much stress had been laid, in the course of this discussion, upon the fact that a sufficient supply of cannel could not be obtained for the use of the metropolitan companies; but the witness examined after this gentleman (Mr. Lancaster) stated in his evidence that he was the owner of a large undeveloped field of cannel, calculated to contain 130 million tons. That was an answer to the question as to the probable exhaustion of the cannel-fields. He hoped and trusted that the board would be empowered by Parliament to have some control over the gas companies; but as to the board being compelled to make a purchase of the companies, in his humble opinion it would be a very bad thing.

Mr. NEWTON, in reply, said the Blue-Book had been very much abused in the course of the discussion, but he would ask—if not from this source, where were they to get their facts? It was rather strange that the gentleman most loud in abusing the Blue-Book, spoke upon some authority or other to facts of which he said personally he knew nothing. He told the board he knew no more of gas than gas knew of him, and yet he desired to impress them with the conviction that 18-candle gas could not be made for 3s. 6d. per 1000. But he (Mr. Newton) would remind the honourable member that all the facts upon which the committee relied were not taken from the Blue-Book. They had other sources of information, and the committee devoted a great deal of attention to this question. In fact, he knew of no question which had been more thoroughly sifted; and, in answer to the honourable member (Mr. Brushfield) who wanted the report sent back to the committee, he would say there had never been a question before the board more completely investigated, and to which more time had been devoted than this. If Mr. Brushfield had not been able to attend the committee, he must not conclude that those who had attended had not given the matter the greatest attention in their power, and that they had not now brought out the best results they could from the materials at their disposal. He did not believe that if the report were sent back the committee could do more than they had done. The honourable member had spoken about the committee constituting themselves into a tribunal to examine witnesses in the same way as a committee of the House of Commons; but he begged to assure him that nothing of the sort could ever take place, and he thought the Government would feel it an act of discourtesy if the board did not return them an answer to the plain and simple questions asked at the earliest moment. Indeed, he had been told that the postponement of the question last week was a slight upon the Government. They had been asked two simple questions—the Government were not bound to adopt their answers; they asked them to give the best judgment they could upon those two questions, and he thought they should do so without delay. With reference to the price of gas at Plymouth, Mr. Elt seemed to think there was some mistake in the price, but if he would refer to the return made to parliament he would find that it was quite correct. Mr. Richardson had made some inquiries respecting the expense to be entailed upon the board by the appointment of proper officers for the testing of the gas. If he would turn to page 7 of the report, the honourable member would find, first of all, that the proposed chemical board, to be appointed by this board for regulating the analysis of the purity and illuminating power of the gas, was to be paid by the companies. And then it was proposed that public officers for the purpose of testing the illuminating power and purity of the gas should be appointed by the board, one for each district. He might state that the resolution of the committee was, that with regard to the control of the testing, they would recommend the board to adopt the resolutions suggested by the select committee of the House of Commons in their report. That report recommended that there should be two districts, one compre-

heading the City and the other the rest of the metropolis, and that the local authority in each should appoint its own inspector. That was the intention of the committee of this board. Probably it would have been a little more explicit if they had so stated it; but clearly they did not mean that there should be a separate inspector for each of the 37 districts into which the Metropolis Local Management Act divided the metropolis. What they meant was that there should be two districts, and one inspector for each, and that they should act under one chief analyst, who would see that the whole business was carried out in a proper manner. He (Mr Newton) was quite prepared to say that whatever the cost of those officers might be—one or two—because it all depended upon whether the gas supply in the City was under the management of this board or not—that cost would be less than the amount now paid to the different inspectors in the metropolis. There had been a good many expressions of opinion as to what should be done and what should not be done; but, as the report did not enter into that, he did not feel that it was his duty to do so. If he did, he should say that he approved of the transfer of the several gas-works to the board, and that he thought the companies were blind to their own interests if they offered the slightest opposition to that transfer upon the just and equitable terms offered in the report.

The amendment was then put to the meeting and lost, there being only three hands held up in its favour.

Mr. BRUSHFIELD then moved—"That the whole subject be referred back to the committee, for them to take the opinion of engineers and other persons conversant with the manufacture of coal gas." Notwithstanding all that had been said by Mr. Newton, he believed the committee could not go before any tribunal and give a proper answer to any question in reference to the manufacture of gas. He knew very well that complaints had been made of the want of efficient control over the gas companies, and he was quite prepared to have that complaint thoroughly investigated, and the control vested in the board. He was also willing that there should be an independent officer appointed for testing the gas, for he thought it was only an act of justice that the public should be made acquainted with the quality of the article supplied to them, and that, if the companies were deceiving them, it should be known to the world. For his own part, he believed that the company to which he belonged had practised no deception at all. Complaints had also been made about the companies paying back dividends. No doubt it was a comfortable thing to have them, but he was afraid they were now all exhausted. Yet gentlemen ought to understand one thing about it, viz., that the Act of Parliament they found so much fault with—the Act of 1860—set aside and repealed an old Act of Parliament, under which the gas companies were originally established, which did not confine the payment of back dividends to six years, but justified the companies in going back to the first moment of their existence and making up all deficiencies in former dividends to 10 per cent. For years some of the companies never paid any dividends at all, and yet the Act of 1860 limited the payment of back dividend to a period of six years. All that he asked was that the companies should be fairly dealt with, and he was convinced that what the committee recommended they should be compelled to do—viz., supply 18-candle gas—was an entire impossibility. He believed that if, instead of relying upon the Blue-Book, the committee would take the trouble to make themselves thoroughly acquainted with the subject, as, in justice to the companies, they were bound to do, they would come to a different conclusion to that which they had now reported.

The amendment not being seconded, fell to the ground.

Mr. RICHARDSON withdrew the amendment of which he had given notice, to limit the dividends on any new capital raised by the gas companies to 5 per cent.

The resolution to agree with the committee in their report was put, and carried without a division.

METROPOLIS WATER SUPPLY.

At the Meeting of the Commissioners of Sewers on the 11th inst., Dr LETHEBY laid before the court the following report:—

"Gentlemen,—In accordance with your request, I submit my report on the matter referred to in the letter from the Metropolitan Board of Works of the 30th of October last, respecting the present water supply to the metropolis, and asking for information thereon.

"I may premise that I have for many years past regularly examined the quality of the water supplied by all the water companies to the metropolis, and the results have been published monthly by the Metropolitan Association of Medical Officers of Health.

"The average of these results for the eleven months of the present year are shown in the Table No. I; and they indicate a very satisfactory condition of the water supply, both as regards the quantity and chemical quality of the water.

"At the present time, the average daily supply of water to the metropolis is nearly 93 million gallons. This is at the rate of rather more than 200 gallons per house, or over 30 gallons per head. In the year 1851, when there was a Government commission appointed to inquire into the condition of the metropolitan water supply, it was found that the average daily supply to the whole of London was only a little more than 45 million gallons. This was at the rate of 19 gallons per head. In the course of 16 years, therefore, the amount of water daily supplied to the metropolis has been more than doubled, and the proportion per head has risen from 19 gallons to 30.

"It appears also that the chemical quality of the water has notably improved. This will be evident from a comparison of the Tables No. I. and No. II.—the former of which shows the composition of the water in 1866, and the latter in 1851. At present the water derived from the Thames contains about 19½ grains of solid matter per gallon, of which a little less than 1 grain is composed of organic and other matters, which are volatile at a red heat. In 1851 the total amount of solid matter in the water from the Thames ranged from 21 to nearly 23 grains per gallon, and of this from 1½ to 3 grains were volatile at a red heat. So also with regard to the water derived from other sources than the Thames, for it will be seen that the total amount of solid matter has been diminished about 3 grains per gallon, and the organic and other volatile constituents have been reduced from about 3 grains per gallon to 1 grain. There has, therefore, been a marked improvement in the quality of the water during that interval; and no doubt this has been effected by better methods of storeage, as in covered reservoirs, and by very careful processes of filtration at the companies works. The total quantity of real organic matter in the water supplied to the metropolis at the present time is surprisingly small, for it does not in any case amount to three-quarters of a grain per gallon. In the water derived from the Thames, it averages about six-tenths of a grain per gallon; in that supplied by the East London Company, it is a little less than half a grain per gallon; in the New River water, it is only a quarter of a grain; and in that of the Kent Company, it hardly amounts to the tenth part of a grain per gallon. It must be admitted, however, that in a sanitary point of view it is not so much the *quantity* of organic matter as the *quality* of it which determines the fitness of water for domestic purposes. In the present case, there is no evidence, chemical, physical, or pathological, that the organic matter in the water supplied to the metropolis is any other than the harmless products of vegetable and infusorial growths. Contrasted with the water obtained from the surface wells in London,* the difference of quality is most striking, for not only is there an absence from the companies waters of the saline substances which are peculiarly characteristic of animal excreta, but the nature and amounts of the volatile matters, commonly called organic, are essentially different. I refrain from entering on the question which has called for this report—namely, the observed relation or connexion of the water supply in any part of the metropolis with the recent epidemic—for I intend to make this the subject of a special inquiry and report to you; but I may state that, while there is ample proof of the propagation of choleraic disease by certain well waters of London, there is at present no evidence that the public water supply has had anything whatever to do with the localization or spread of the recent epidemic. Already in the eastern parts of London, where the disease was most fatal, the medical officers of health have reported to this effect, and have shown that the largest mortality from cholera was of persons who were not water drinkers, and that teetotallers and others who drank largely of the East London water in its unboiled condition have been singularly exempt from the disease. At the City of London Workhouse at Bromley, where the inmates partook of well water alone, there were 20 deaths from the epidemic in one week; whereas at the East London Workhouse at Hackney, which is supplied with the East London Company's water, there has not been a single death from cholera. So also in the eastern part of the City of London, I have been unable to trace the least connexion between the epidemic and the water supply. As far, therefore, as medical observation has hitherto gone, there has been no proof of the soundness of the hypothesis which has led to these inquiries.

"As regards the other question which has been submitted to me—namely, the desirability of a constant supply as compared with an intermittent—there can be but one opinion: as an abstract question, indeed, it admits of no discussion; for it is admitted on all hands that a constant supply secures to us an unlimited quantity of water in its purest and most agreeable condition. But the practical difficulties of it in this metropolis are immense. At the present time there is hardly a house in London which has the fittings in a proper condition to receive it, and until this is altered it is vain to expect a constant service. The 15th section of the Metropolis Water Act of 1852 gives power to the inhabitants of any district supplied by a water company to enforce a constant supply, provided that four-fifths of the owners or occupiers of the houses on any main demand it in writing, and put their pipes, cocks, cisterns, machinery, and arrangements of all kinds in proper condition to receive it. This is the first step towards the realization of such an object; and the maintenance of a constant supply can only be by the strictest supervision, and by the most rigid enforcement of every obligation on the part of the owners of houses through the severest penalties. If indeed there be neglect or wilful derangement of the taps, cisterns, or other machinery used in the water-service of any house, there will not only be an enormous waste of water and the depriving of others of it who are at a higher level, but there will also be great danger to property from the escape of the water and the flooding of houses. Anything indeed like the carelessness which now prevails in respect of the taps and fittings, would cause such a waste of water as no source of supply could maintain; and I much doubt if the London public would submit to the strict supervision and the severe obligations which a well regulated constant supply demands. It is well enough to entertain the matter in its speculative and abstract relations as an unquestionable advantage, but it is another thing to fulfil the obligations which its practical adoption imposes. This is manifested by the disinclination of the occupiers of houses to avail themselves of the Act of Parliament by making proper provision for it; for what could be easier, if a constant supply were really desired, than the specified legal process for obtaining it. I believe that the London water companies are not adverse to such a supply, but they very properly insist upon the conditions which are necessary for its adoption and maintenance; for they look with alarm at the consequences of it with the present state of things. Whenever in the City we have guaranteed that there should be no waste of water, by providing a waste-water-preventer, we have met with no difficulty from the companies in obtaining a constant supply, and I submit a list of places where the Commissioners of Sewers and the Jewish Board of Guardians have erected stand-pipes, with constant service, for the use of the poor. And I should regard it as an inestimable advantage, if, by such a service, we could everywhere abolish the filthy butts and cisterns of the lodging-houses of the City.—I remain, gentlemen, your obedient servant,

"HENRY LETHEBY."

* See table given in JOURNAL OF GAS LIGHTING, Sept. 4, p. 676.

No. I.—*Composition and Quality of the Metropolitan Waters in the Year* 1866. From the analysis by Dr. Letheby, as published in the monthly returns of the Metropolitan Association of Medical Officers of Health:—

Population, 3,067,536. Average daily supply, 92,734,100 gallons = 30·2 gallons per head.

Names of Water Companies.	Total Solid Matter per Gallon.	Loss by Ignition.*	Oxidizable Organic Matter.†	Hardness.		Average Daily Supply.
				Before Boiling.	After Boiling.	
Thames Water Comps.	Grs.	Grs.	Grs.	Degs.	Degs.	Galls.
Grand Junction	19·52	0·98	0·59	13·1	3·6	8,551,800
West Middlesex	18·95	0·96	0·59	13·0	3·4	8,102,300
Southwark and Vauxhall	19·77	1·04	0·62	13·0	3·6	12,367,000
Chelsea	19·16	0·86	0·53	13·0	3·6	7,748,000
Lambeth	19·63	1·04	0·66	13·0	3·6	8,694,100
Other Companies.						
Kent	26·97	1·10	0·10	18·3	7·8	5,927,200
New River	18·61	0·91	0·25	14·1	4·1	22,729,700
East London	20·41	1·01	0·45	14·8	4·6	18,614,000

* The loss by ignition represents a variety of volatile matters, as well as organic matter, as ammoniacal salts, moisture, and the volatile constituents of nitrates and nitrites.

† The oxidizable organic matter is determined by a standard solution of permanganate of potash—the available oxygen of which is to the organic matter as 1:8; and the results are controlled by the examination of the colour of the water when seen through a glass tube 2 feet in length and 2 inches in diameter.

No. II.—*Composition and Quality of the Metropolitan Waters in the Year* 1851, *when the Water was not Filtered.*

From the report of the Government Commission on the Chemical Quality of the Supply of Water to the Metropolis in 1851.

Population, 2,362,236. Average daily supply, 45,885,900 gallons = 19·4 gallons per head.

Names of Water Companies.	Total Solid Matter per Gallon.	Loss by Ignition.*	Oxidizable Organic Matter.	Hardness.		Average Daily Supply.
				Before Boiling.	After Boiling.	
Thames Water Comps.	Grs.	Grs.	Grs.	Degs.	Degs.	Galls.
Grand Junction	21·72	3·07	..	14·0	..	3,541,700
West Middlesex	22·67	2·75	..	14·6	5·5	3,334,000
Southwark and Vauxhall	21·08	1·51	..	15·0	..	6,013,700
Chelsea	21·28	2·38	..	14·4	..	3,940,700
Lambeth	20·40	2·59	..	14·2	..	3,077,300
Other Companies.						
Kent	29·71	2·61	..	16·0	..	1,079,300
New River	19·50	2·79	..	14·9	4·1	15,435,600
East London	23·51	4·12	..	15·0	..	9,036,000

* The loss by ignition represents a variety of volatile matters, as well as organic matter, as ammoniacal salts, moisture, and the volatile constituents of nitrates and nitrites.

The report was ordered to be printed, and a copy sent to each member of this court, and of the Court of Common Council, and to the members of the Metropolitan Board of Works.

FATAL EXPLOSION OF GAS.

On Saturday evening a terrible calamity occurred at two dwelling-houses near Leather Lane, whereby several persons were killed and many were dangerously injured. The street in which the calamity occurred is a little thoroughfare called Summer Street, leading form Eyre Street Hill to Back Hill, and the inhabitants are mostly Italians, who pursue various avocations, some making and repairing the street organs, others engaged in the looking-glass manufacture, and not a few being peripatetic organ-grinders. At No. 4, a house which is described as having belonged to a padrone who employed a number of these organ-men, a loud explosion was heard at about five o'clock, and from the basement part of the house there burst forth flames which enveloped the whole of the site, while at the same time the house and part of the adjoining building, No. 5, fell with a loud crash. Captain Shaw and several engines of the Metropolitan Fire Brigade were quickly on the spot, and the fire was limited to the place where it commenced. The hour at which the calamity occurred was one at which the in general thickly populated houses were nearly empty, the organ-men not having returned; but all who were there or near the spot at the time received injury. The people about the place describe the scene which ensued in the conflagration as most exciting. The houses opposite were in danger of catching fire, and, in fact, they were injured by the explosion, and the inhabitants, in the desperate effort to save some part of their little homes, ran into very great danger. A cry was raised that many people were buried in the ruins, and as fast as the rubbish could be moved it was turned over in search of bodies. The master of the organ-men was taken out at an early part of the evening, and, with a woman named Susan Grego, was taken to St. Bartholomew's Hospital, where they were attended by Mr. R. Bond Moore and Mr. Cuddeford, the house surgeons. The woman is in a very dangerous condition, having many broken bones, and being more or less bruised all over the body. The man was more injured by the falling material than by fire. Three persons were taken to the Royal Free Hospital, where they were attended by Mr. Hill, the resident surgeon, and Mr. Fagge and Mr. Attwell—one named William Cole, who died at nine o'clock on Sunday morning; a woman named Domenica Villa, who is so severely injured that there is not the slightest hope of her recovery; and a man named Hince, who was knocked down by the explosion while in the street, and was severely injured in the spine. A body was found in the ruins at four o'clock on Sunday morning, and taken to the Holborn Workhouse. A statement worthy of record is made respecting the rescue of the woman Grego. It is said that her son, a young man aged about 20, was assisting her and a child out when the floor gave way and let her through. The young man clutched at the child and rescued it, and made his way over some rafters to the roof of an adjoining house, where he deposited it. He then returned, went down the hole through which he saw his mother fall, and succeeded, at the imminent risk of his own life, in dragging her out. It is right to mention that it is alleged the explosion was not the cause of the calamity, but was a consequence of the house, No. 4, falling down. The man alive in the Royal Free Hospital states that he heard and felt the explosion, and heard nothing before that. The whole affair will be fully investigated in the coroner's inquiry as to the deaths of the persons killed.

Dr. Whitmore's Report on the Quality of the Gas supplied in St. Marylebone, in November, 1866:—

November.	Illuminating Power in Sperm Candles.			Mean Pressure in 10ths of an inch.	
	*Mean of 25 Observations.	Highest.	Lowest.	Highest.	Lowest.
Imperial Company's gas	14·40	15·07	13·72	21·37	8·70
Chartered Co.'s common gas	13·00	14·30	12·15	32·70	13·52
Chartered Co.'s cannel gas	20·89	23·69	19·25	33·77	13·01

* Each observation consists of 10 readings of the photometer.

During the past month the Imperial Company's gas has maintained a high illuminating power, its mean intensity of light has been equal to nearly 14½ candles; on four occasions it exceeded 15 candles, and once only did it fall below 14 candles. Its pressure was satisfactory. As regards purity, the mean quantity of sulphur in 100 cubic feet did not greatly exceed 12 grains. The common gas of the Chartered Company has given a mean light of 1 candle above the standard, and twice it exceeded 14 candles; its pressure was also uniformly good. The sulphur compounds in the gas have of late very much decreased, not more than 13½ grains of sulphur being found in 100 cubic feet. The cannel gas of the same company has given a mean light of nearly 1 candle above the standard; once only did it fall below it. All the gases have as usual been free from sulphuretted hydrogen; but, on the other hand, the test-paper has always shown the presence of ammonia. The above results are obtained from the gas manufactured by the Imperial Company at their Fulham works, and from the common and cannel gas of the Chartered Company at their works in the Horseferry Road, Westminster.

Dr. Whitmore's Report on the Quality of the Water supplied in St. Marylebone, in November, 1866:—

November.	Total Solid Matter in degrees or grains per Imperial gallon.		* Loss by Incineration of Solid Matter in previous column.		Ammonia.
	Nov., 1865. 0°	Nov., 1866. 0°	Nov., 1865. 0°	Nov., 1866. 0°	0°
Distilled Water					
West Middlesex water	21·20	20·80	1·92	0·90	....
Grand Junction water	21·68	21·52	1·96	1·03	....

* The loss by incineration of the solid matter represents the amount of organic and other volatile matters contained in 70,000 grains of water.

Dr. Hillier's Report on the Gas supplied by the Imperial Company to the Vestry of St. Pancras during the Month of November, 1866:—

Maximum light estimated by sperm candles according to the Act	14·7
Minimum light—sperm candles	13·4
Average light—sperm candles	14·0
Traces of ammonia, indicated by turmeric test-paper	Usually.
Traces of sulphuretted hydrogen, indicated by lead test-paper	Never.

The average illuminating power during November was equal to 14 standard sperm candles; the lowest was 13·4 and the highest 14·7. Ammonia was present in excess on almost every occasion. There was no trace of sulphuretted hydrogen. In 100 cubic feet there was found 17·1 grains of sulphur.

Share List of Metropolitan Gas Companies.

No. of Shares issued.	Amount per Share.	Name of Company.	Amount paid up per Share.	Div. per Cent. per Annum	Price per Share.
	£		£ s d	£ s d	£ s d
8000	10	Anglo-Romano	10 0 0	9 0 0	11 to 13
5000	20	Bahia (Limited)	20 0 0	4 0 0	16 10 0
1000	20	Do., preference	20 0 0	10 0 0	27 10 0
750	20	Do., do., redeem.	10 0 0	10 0 0	12 10 0
30000	5	Bombay (Limited)	5 0 0	£3 intr.	4¼ to 4¾
10000	5	Do., third issue	4 0 0	£5 intr.	3¾ to 3¾
10000	20	British, Limited (Norwich, Huilscalcoates, Hanley, Tunstall & Shelton (Potteries), Trowbridge, & Holywell.)	20 0 0	10 0 0	27 to 29
12000	50	*Chartered*	50 0 0	10 0 0	64 to 64½
6000	50	Do.	35 0 0	10 0 0	43 to 45
10000	20	*City of London*, A shares	20 0 0	10 0 0	26 to 27
10000	10	Do., B shares	10 0 0	4 0 0	6 to 6¾
8000	10	Do., new shares	10 0 0	10 0 0	13 to 14
25000	25	City of Moscow (L)	25 0 0	£7 intr.	15 to 17
17430	25	*Commercial*	25 0 0	10 0 0	34 to 35
2500	20	Continental Union	20 0 0	8 0 0	14 to 16
17500	20	Do.	15 0 0	8 0 0	9 to 11
10000	20	Do., preference	20 0 0	7 0 0	
5827	5	County & Gen. (L)	5 0 0		
2000	5	Do., preference (Pater, Pembroke, Ely, Lea Bridge, Northfleet, Walton, & Ware.)	5 0 0		
5000	10	*Crystal Pal. Dist.*	10 0 0	10 0 0	16 to 16½
5000	10	Do., preference	10 0 0	6 0 0	12½ to 13
10080	10	Do.	2 10 0	7 0 0	2½ to 3
4000	50	*Equitable*	50 0 0	10 0 0	70 to 72
4000	25	Do., new shares	25 0 0	10 0 0	35 to 36
23406	10	European (Lim.)	10 0 0	10 0 0	12 to 12½
12000	10	Do., new shares	5 0 0	10 0 0	6 to 6¾
		Boulogne, Amiens, Rouen, Caen, Havre, & Nantes.)			
20000	10	*Gt. Cent. Gas Cons.*	10 0 0	10 0 0	13 to 13½
5000	10	Hong Kong (Lim.)	10 0 0		8 to 10
26000	50	*Imperial*, old sh.	50 0 0	10 0 0	72 to 73
1300	100	Do., bonds	£100	10 0 0	185 to 190
7000	25	Imperial Austrian	10 0 0		
28000	50	*Impl. Continental* (Amsterdam, Berlin, Ghent, Hanover, Lille, Rotterdam, Aix-la-Chapelle, Antwp., Bordeaux, Brussels, Cologne, Frankfort-on-M., Haarlem, Stolberg, Toulouse, & Vienna	13 15 0	16 0 0	89 to 90
400	100	Impl. Mexican (L.)	75 0 0		
3000	40	*Independent*	40 0 0	10 0 0	60 to 61
3000	10	Do.	10 0 0	5 0 0	7 to 9
3000	20	Do.	12 10 0	7 10 0	13 to 14
7133	50	*London*	50 0 0	10 0 0	60 to 61
5610	25	Do., 1st pref.	25 0 0	6 0 0	25 to 27
503	50	Do., 2nd pref.	50 0 0	6 0 0	
214	50	Do., 3rd pref.	50 0 0	6 0 0	
18781		Do., 1st pref. sk		6 0 0	
11828		Do., 2nd pref. sk		5 0 0	
12000	5	Malta & Medit. (L.)	5 0 0	3 0 0	3 to 3¼
6000	5	Do., preference	4 0 0	7 0 0	4 0 0
30000	5	Oriental, Calcutta	5 0 0	8 10 0	5¼ to 5½
30000	5	Do., new shares	1 0 0	8 10 0	1 to 1¼
10000	5	Ottoman (Limited)	5 0 0		2 to 4
10000	10	Park (Limited)	10 0 0	£6 intr.	9¼ to 9½
27000	20	*Phœnix*	20 0 0	10 0 0	27¼ to 27½
3600	100	Do., new	20 0 0	7 10 0	22 to 22½
144000	Sk.	Do. (capit. profits)		5 0 0	72 to 74
5000	20	*Ratcliff*	20 0 0	10 0 0	25 to 27
	20	Rio de Janeiro (L.)	20 0 0	10 0 0	21 to 22
6959	5	Singapore (Lim.)	5 0 0	3 10 0	
2000	5	Do., preference	5 0 0	7 10 0	
		Shanghai			
4800	50	*Sth. Metropolitan*	50 0 0	10 0 0	70 to 72
15000	10	*Surrey Consumers*	10 0 0	10 0 0	13¾ to 14
10000	10	Do., new	5 0 0	10 0 0	6¾ to 7
9000	50	United General (Limerick)	50 0 0	4 12 0	28 to 29
10000	10	*Victoria Docks*	5 0 0	6 0 0	
3000	10	*Wandsworth & Putney*	10 0 0	7 10 0	13¾ to 14
20000	10	Western (L.) A sh.	10 0 0	10 0 0	14 to 14½
10000	10	Do., B shares	5 0 0	10 0 0	6¾ to 7
10000	10	Do., C shares	3 0 0	10 0 0	4½ to 5
20000	10	Do., D shares	1 0 0	10 0 0	1¾ to 2
8000	5	*West Ham*	5 0 0	7 10 0	6 10 0
6000	5	Do., new shares	3 0 0	7 10 0	3 18 0
551	10	West London Junction (Lim.)	10 0 0	6 0 0	
520	10	Do., preference	10 0 0	6 0 0	

Share List of Provincial Gas Companies.

(Directors and Managers of Gas-Works are earnestly requested to enable us to rectify any errors and fill up the omissions in the following List.)

The Companies whose names are printed in italic type are incorporated by Act of Parliament.

No. of Shares issued.	Amount per Share.	Name of Company.	Amount paid up per Share.	Div. per Cent. per Annum.	Price per Share.
	£	**ENGLAND.**	£ s d	£ s d	£ s d
360	5	Aberavon (Lim.)	5 0 0	6 0 0	5 0 0
		Aberdare			
		Aberdovey			
400	5	Abergele (Lim.)	5 0 0	4 0 0	5 0 0
		Aberystwith			
530	10	Abingdon	10 0 0	6 0 0	12 0 0
1050	10	*Acerington G.& W.*	10 0 0	& Bns.	15 0 0
1050	10	Do., new shares	10 0 0		15 0 0
2100	5	Do., do.	5 0 0		7 10 0
2100	5	Do., do.	1 0 0		1 10 0
2100	2½	Do., do.	0 10 0		0 15 0
1200	5	Airdale (Limited)	5 0 0	10 0 0	8 10 0
300	5	Do., new shares	0 10 0	8 0 0	
24	75	Alcester	75 0 0	4 0 0	80 0 0
128	10	Aldborough (Lim.)	10 0 0	5 0 0	
269	10	Alderney	10 0 0	5 0 0	11 0 0
2500	10	Aldershot G. & W.	6 0 0		
		Aldrington, B., & H.			
300	6	Alfreton	6 0 0	5 0 0	5 10 0
		Alnwick			
		Alston Moor			
250	10	Alton	10 0 0	10 0 0	12 0 0
1600	5	Altrincham	5 0 0	6 0 0	6 0 0
		Amersham			
		Amlwch (Lim.)			
170	10	Ampthill	10 0 0	4 0 0	9 0 0
350	10	Andover	10 0 0	6 0 0	12 0 0
358	5	Appleby	5 0 0	2 10 0	2 15 0
260	10½	Arundel	10 10 0	7 10 0	13 0 0
250	10	Ashbourne, Derby.	10 0 0	6 0 0	13 10 0
292	5	Ashburton	5 0 0	5 0 0	
84	30	Ashby-de-la-Zouch	30 0 0	6 0 0	
700	10	Ashford (L.), Kent	10 0 0	6 0 0	11 10 0
1600	30	*Ashton-und-Lyne.*	30 0 0	10 0 0	60 0 0
		Aspatria			
590	5	Atherstone	5 0 0	9 0 0	8 10 0
		Attleborough			
		Axminster			
200	20	Aylesbury	20 0 0	5 0 0	21 0 0
150	10	Aylsham (L.), Nrfk	10 0 0	5 0 0	12 10 0
3093	10	*Bacup (Rossendale Union)* ordinary	10 0 0	& Bns. 10 0 0	16 0 0
600	10	Do., preference	10 0 0	10 0 0	16 0 0
2597	10	Do., new issue	6 0 0	10 0 0	11 0 0
1503	10	Do., 2nd new iss.	8 0 0	7 0 0	10 0 0
300	5	Bakewell	5 0 0	8 0 0	8 0 0
200	10	Baldock	10 0 0	5 0 0	10 0 0
1000	10	*Banbury* (Limited)	10 0 0	7 10 0	15 0 0
2650	10	*Bangor Gas & Wr.*	10 0 0	7 10 0	12 0 0
		Barmouth (L) £1500			
260	10	Barnard Castle	10 0 0	5 10 0	10 15 0
800	5	Barnet	5 0 0	6 0 0	5 10 0
		Barnsley £6000		7 10 0	
109	20	Barnstaple	20 0 0	7 10 0	
		Barrow-in-Furness Gas and Water		& Bns.	
1158	2	Barton-on-Humb.	2 0 0	5 0 0	2 0 0
120	25	Basingstoke	25 0 0	8 0 0	35 0 0
120	10	Do.	10 0 0	8 0 0	14 0 0
2500	16	*Bath*, A shares	16 0 0	8 0 0	} 38 10 0
2500	8	Do., B shares	8 0 0	7 0 0	} united
2500	10	Do., C shares	10 0 0	7 0 0	14 8 6
5000	10	Do., D shares	3 0 0	7 0 0	4 15 0
		Battle £2000		6 0 0	
56	26⅔	Bawtry	26 12 6	6 0 0	25 0 0
		Beaminster			
710	10	*Beccles Gas & Wr.*	10 0 0	2 10 0	
		Bedale, Yorkshire			
300	30	*Bedford*	25 0 0	4 0 0	20 0 0
390	10	Bedworth	10 0 0	5 0 0	10 0 0
300	3	Belford	3 0 0		1 10 0
350	10	Belper	10 0 0	10 0 0	14 0 0
		Berkhampstead			
1086	10	Berwick & Tweed-	10 0 0	10 0 0	16 0 0
120	20	Bewdley . [mouth	16 0 0	5 0 0	16 0 0
200	10	Bicester	10 0 0	5 10 0	11 0 0
		Biddulph, Bradley Gr., & Black Bull			
330	10	Bideford	10 0 0	6 0 0	10 10 0
		Biggleswade			
		Billericay			
6000	5	*Bilston*	5 0 0	8 0 0	6 7 6
200	10	Bingham	10 0 0	4 0 0	
800	10	*Bingley*	10 0 0	7 0 0	13 10 0
800	3½	Do.	3 6 8	7 0 0	4 10 0
		Birchington (Lim.)			
1200	80	*Birmingham*, A sh.	80 0 0	9 0 0	135 0 0
400	8	Do., B shares	8 0 0	9 0 0	13 10 0
3750	40	Do., new shares	40 0 0	7 10 0	56 10 0
2400	50	*Birmnghm. & Staff.*	50 0 0	10 0 0	95 10 0
2400	25	Do., new shares	25 0 0	10 0 0	47 15 0
7020	20	Do., do.	20 0 0	10 0 0	38 0 0
12500	28	Do., do.	11 0 0	7 10 0	16 15 0
250	16	*Birstall*	12 0 0	12*s.* 6*d.* per sh.	12 0 0
		Bishop's Auckland			
180	10	Bishop's Castle	10 0 0	5 0 0	10 0 0
230	10	Bishop's Stortford	10 0 0	5 0 0	10 0 0
		Bishp's Wlthm (L)			
6000	15	*Blackburn*, A sh.	15 0 0	9 0 0	27 0 0
6000	15	Do., B shares	2 0 0	6 15 0	3 10 0
		Blaenavon G. & W.			
		Blandford			
		Blyth & Cowpen			
		Bodmin			
		Bodmin Consumers			
		Bognor			
100	10	Bolsover	10 0 0		10 0 0
3909	16⅔	*Bolton*	16 10 0	10 0 0	40 0 0
7466	16⅔	Do., new shares	8 0 0	6 10 0	
		Boroughbridge (L)			
800	10	*Boston*	10 0 0	8 10 0	
1200	10	Do., new shares		8 10 0	
	5	Boston Spa (Lim.)	5 0 0	6 10 0	5 10 0
		Botesdale (L), Suff.			
200	5	Boughton Blean	5 0 0	5 0 0	5 0 0
193	10	Bourn	10 0 0	5 0 0	
		Bournemouth Gas and Water			
160	10	Brackley	10 0 0	6 0 0	10 0 0
		Bracknell (Lim.)			
		Bradford, Wilts			
25		*Bradford, Yorksh.*	25 0 0	10 0 0	49 0 0
		Braintree			
		Brampton, Cumb.			
		Brandon, Suffolk			
579	10	Brecon (Limited)	10 0 0	10 0 0	18 to 20
397007	Sk.	*Brentford*	All.	5 10 0	124 0 0
2000	20	Do., A shares	1 0 0	7 10 0	
2187	20	Do., preference	20 0 0	5 0 0	20 0 0
313	20	Do.	5 0 0	5 0 0	5 0 0
		Brentwood			
		Bridge, near Cant.			
		Bridge-end, Glam.			
		Bridgenorth (L)			
200	50	*Bridgwater*	50 0 0	7 0 0	50 0 0
520	10	Bridlington (L)	10 0 0	7 10 0	12 10 0
450	10	Bridport	10 0 0	7 10 0	12 0 0
450	10	Do., new shares	1 0 0		
6000	5	*Brierly Hill*	5 0 0	4 0 0	5 2 6
		Brigg			
		Brightlingsea (L)			
3375	20	*Brighton*	20 0 0	8 10 0	
675	20	Do., new shares	4 0 0	8 10 0	
4020	20	*Brighton & Hove*	20 0 0	9 0 0	
		Brimscombe (L)			
204500	Sk.	*Bristol United*	Stock.	10 0 0	180 to 182
300	5	*Briton-ferry*	5 0 0		
150	8	Brixham	8 0 0	5 0 0	
		Broadstairs			
2000	10	*Bromley*, Kent	10 0 0	8 0 0	14 10 0
3000	10	Do., new shares	3 0 0	8 0 0	4 4 0
		Bromsgrove			
100	10	Bromyard (Lim.)	10 0 0		
		Broughton			
120	10	Bruton	10 0 0	4 0 0	8 to 9
		Brymbo			
		Brynmawr			
100	25	Buckingham	25 0 0	6 0 0	26 to 27
		Buntingford (Lim.)			
500	1	Burley-in-Wharfdale (Limited)	1 0 0	5 0 0	1 1 0
		Burnham, Bucks			
		Burnham (L) Essex			
		Burnham, Somers.			
1600	5	*Burslem and Tunstall*	5 0 0	10 0 0	9 0 0
2560	5	Do., new shares	5 0 0	7 10 0	7 0 0
440	2½	Burton, Westmoreland (Limited)	2 10 0		
1200	10	*Bury St. Edmnd's*	10 0 0	10 0 0	17 10 0
1800	10	Do., new shares	3 0 0	7 10 0	4 4 0
303	10	Buxton (Limited)	10 0 0	7 10 0	14 0 0
150	10	Caistor	10 0 0	7 0 0	12 0 0
187	5	Callington	5 0 0		5 0 0
215	10	Calne, Wilts	10 0 0	6 0 0	10 0 0
		Calverley (L) York.			
		Camborne			
600	50	*Cambridge*	50 0 0	10 0 0	90 0 0
160	12½	Do., new shares	12 10 0	10 0 0	22 10 0
640	8½	Do., do.	4 0 0	10 0 0	6 0 0
240	50	*Canterbury Gas & Water*	50 0 0	} £6	
240	25	Do., new shares	25 0 0		
240	12½	Do., do.	12 10 0		
240	6¼	Do., do.	6 5 0		
400	25	*Cardiff*, A shares	25 0 0	10 0 0	48 0 0
1200	25	Do., B shares	25 0 0	8 0 0	38 0 0
400	25	Do.	10 0 0	8 0 0	8 0 0
		Cardigan (Limited)			
160	25	Carmarthen	25 0 0	5 0 0	30 0 0
		Carnarvon			
		Carshalton			
200	6	Castlecary	6 0 0		5 0 0
200	10	Castle Donnington	10 0 0	6 0 0	12 14 0
249	5	Castleford	5 0 0	5 0 0	5 0 0
400	5	Castletwn, I. of M.	5 0 0	5 0 0	5¼ to 5¼
620	2	Cawood (Limited)	2 0 0	4 0 0	
		Chatteris			
300	10	Cheadle	10 0 0	6 0 0	12 10 0
200	50	Chelmsford	50 0 0	8 0 0	70 0 0
200	25	Do., new shares	25 0 0	8 0 0	35 0 0
2500	16	*Cheltenham*, A sh.	16 0 0	8 0 0	
2500	8	Do., B shares	8 0 0	7 0 0	
		Do., new shares		7 0 0	
500	10	*Chepstow*, A sh.			
200	10	Do., B shares			
600	5	*Chertsey Consumrs*	5 0 0	5 0 0	6 15 0
600	1½	Do.,	1 10 0	5 0 0	2 0 0
600	2½	Do.,	1 10 0		
230	10	Chesham	10 0 0	5 0 0	10 10 0
30000	Sk.	*Chester United*	Stock.	10 0 0	172 to 174
30000	,,	Do., preference	,,	7 0 0	129 to 131
535	10	Do, new shares	10 0 0	7 0 0	14 0 0
250	5	Chester-le-Street	5 0 0	6 0 0	5 0 0
19200	Sk.	*Chesterfield G & W*	100 0 0	5 0 0	178 0 0
400	50	Do., new shares	50 0 0	5 0 0	52 0 0
		Chesterton (L)			
240	25	Chichester	25 0 0	6 0 0	31 10 0
		Chippenham			
329	10	Chipping Norton (Limited)	10 0 0	5 0 0	
100	10	Chipping Ongar	10 0 0	2 10 0	5 0 0
838	20	Chorley	20 0 0	7 0 0	27 0 0
		Chowbent, Lanc.			
		Christchurch			
200	5	ChurchStretton (L)	5 0 0		5 0 0
680	10	Cirencester	10 0 0	5 0 0	11 0 0
		Clay Cross		& Bns.	
		Clayton, Allerton, and Thornton			
257	10	Cleckheaton, A sh.	10 0 0	7 10 0	
257	10	Do., B shares	10 0 0	7 10 0	
257	10	Do., new shares	10 0 0	7 10 0	
		Cleethorpes			
550	10	Clevedon (L)	10 0 0	7 0 0	11 10 0
		Clitheroe			
1132	5	Cockermouth	5 0 0	5 0 0	5 5 0
300	5	Coggeshall	5 0 0		4½ to 5
900	20	*Colchester*	20 0 0	7 0 0	22½ to 23
		Coleford, Glocester			
		Coleshill (L.) £2000			
160	10	Collingham (Lim.)	10 0 0	5 0 0	10 0 0
		Collumpton			
328	5	Colnbrook, Middsx.	5 0 0	5 0 0	5 0 0
150	20	Colne, Lancashire	20 0 0		36 0 0
150	10	Do., ½ shares	10 0 0	} £10	18 0 0
150	5	Do., ¼ shares	5 0 0		9 0 0
150	5	Do., A shares	5 0 0		9 0 0
150	5	Do., B shares	5 0 0		9 0 0
150	5	Do., C shares	2 0 0		5 0 0
200	25	*Congleton*	25 0 0	5 0 0	31 0 0
320	5	Conway (Limited)	5 0 0		5 0 0
		Corsham			
		Corwen			
1600	25	*Coventry*	25 0 0	8 0 0	35 0 0
	25	Do., new shares	25 0 0	7 10 0	
400	5	Cowbridge	5 0 0	6 0 0	6 0 0
500	10	Cowes	10 0 0	5 0 0	
		Cradley Heath			
190	10	Cranbrook. £1900	10 0 0	7 10 0	
		Crawley		4 10 0	
		Crayford & Bexley.			
		Crays			
420		Crediton	5 0 0	5 0 0	6 0 0
225	10	Crewkerne	10 0 0	6 0 0	10 0 0
		Cricklade (L.) £1000			
200	10	Croft & Hurworth	9 0 0		
1200	1	Crook (Limited)	1 0 0	10 0 0	1 5 0
		Croston (Limited)			
251	5	Crowland	5 0 0	7 0 0	
181	10	Crowle, Lincoln	10 0 0	10 0 0	
8000	5	*Croydon Commrcl.*	5 0 0	7 10 0	7 0 0
		Cuckfield			
250	20	Dartford	20 0 0	7 0 0	27 0 0
700	5	Dartmouth (Lim.)	5 0 0	7 0 0	6 0 0
125	20	Daventry	20 0 0	5 0 0	24 8 0
165	10	Dawley	10 0 0	5 0 0	10 0 0
346	5	Dawlish	5 0 0	8 0 0	7 10 0
1400	10	*Deal & Walmer*	10 0 0	6 10 0	12 0 0
1400	1¼	Do.	1 5 0	4 0 0	1 0 0
350	10	Do.	5 0 0	6 10 0	6 0 0
1200	1	Deddington	1 0 0		
		Dedham (L.) £1000			
		Delph, Yorkshire			
500	6	Denbigh	6 0 0	5 0 0	6 0 0
1750	25	*Derby*	25 0 0	10 0 0	51 0 0
		Dereham			
7000	5	*Devonport*	5 0 0	9 0 0	9 0 0
3000	5	Do., preference	4 0 0	5 0 0	4 0 0
7400	5	*Dewsbury & Batley*	5 0 0	10 0 0	10 0 0
3700	5	Do., new shares	5 0 0	7 10 0	7 10 0
		Diss			
		Dolgelly			
160	10	Donnington	10 0 0	5 0 0	10 0 0
340	27½	Dorchester	25 0 0	5 0 0	27 10 0
120	25	Dorking	24 0 0	5 0 0	25 0 0
		Donnington, Linc.			
192	25	Douglas, L. of Man	25 0 0	8 0 0	30 0 0
219451	Sk.	*Dover*	100 0 0	6 0 0	100 0 0
1855	10	Do., new shares	10 0 0	6 0 0	10 0 0
500	10	Dowlais (Limited)	10 0 0	8 0 0	12 0 0
25	60	Downham Market	60 0 0	7 10 0	
		Driffield			
3000	5	*Drighlington and Gildersome*	5 0 0	7 10 0	7 15 0
		Droitwich			
1000	20	*Droylsden*	9 0 0	8 5 0	
600	30	*Dudley*	30 0 0	6 6 0	38 to 40
1500	20	*Dukinfield*	16 0 0	10 0 0	33 0 0
200	10	Dunmow	10 0 0	5 0 0	10 0 0
		Dunstable			
900	10	Durham	10 0 0	10 0 0	} £26
900	10	Do., new shares	5 10 0	10 0 0	
250	10	Dursley, Glouestr.	9 0 0	6 0 0	9 5 0
150	5	Easingwold	5 0 0	5 0 0	
		East Barnet G. & W.		4 10 0	
400	10	Eastbourne	10 0 0	5 0 0	11 0 0
90	20	East Dereham	20 0 0	5 0 0	21 0 0
356	5	East Grinstead	5 0 0	6 0 0	5 0 0
		Easton (Limited)		5 0 0	
1200	5	East Retford	5 0 0	10 0 0	7 10 0
		Eckington & Mosboro' (Limited)			
		Edgware			
		Egremont, Cumb.			
703	6½	*Elland*	6 10 0	8 0 0	10 0 0
800	5	Elsecar (Limited)	5 0 0	5 0 0	5 12 0
		Eltham			
200	10	Emsworth			
400	5	Enfield	5 0 0	5 0 0	5 0 0
		Epping (Limited)			
300	19	Epsom & Ewell	19 0 0		
		Erith			
325	10	Eton—Cannel Gas	10 0 0	5 0 0	10 0 0
700	10	Evesham (Lim.)	10 0 0	6 0 0	9½ to 10
1600	25	*Exeter*	25 0 0	8 0 0	40 to 42
250	10	*Exmouth*	10 0 0	5 0 0	10 0 0
58	25	Eye	25 0 0	5 0 0	25 0 0
170	10	Fairford	10 0 0	3 0 0	

No. of Shares issued.	Amount per Share.	Name or Company.	Amount paid up per Share.	Div. per Cent. per Annum.	Price per Share.
	£		£ s d	£ s d	£ s d
		Fakenham(L)£3500			
		Falkingham			
		Falmouth			
100	38	*Fareham*	38 0 0	5 0 0	
223	25	Farnham	25 0 0	7 0 0	35 0 0
		Farnworth and Kearsley			
		Farringdon			
140	50	Faversham	50 0 0	10 0 0	66 0 0
		Fazeley (L.) £3000			
120	10	Fenny Stratfd.(L.)	10 0 0	5 0 0	11 0 0
	5	Filey	5 0 0	5 0 0	5 0 0
		Fleetwood			
2400	10	*Folkestone*	10 0 0	10 0 0	15 0 0
1200	10	Do., new	4 0 0	10 0 0	
280	5	Framlingham	5 0 0	5 0 0	5 10 0
1155	1	Frodsham (Lim.)	1 0 0	5 0 0	1 0 0
320	25	*Frome*	25 0 0	10 0 0	
		Furness G. and W.			
120001	Sk.	*Gainsborough*	All	6 13 4	120 to 123
400	20	Do., new shares	9 0 0	6 13 4	10 0 0
170	10	Gillingham (Lim.) Dorset	10 0 0	3 0 0	
103	25	Glastonbury	25 0 0	4 0 0	15 0 0
600	10	*Glossop*	10 0 0	9 0 0	16 0 0
600	5	Do.	5 0 0	9 0 0	8 0 0
1800	10	Do., new shares	6 10 0	7 10 0	8 10 0
1000	25	*Gloucester*, A sh.	25 0 0	10 0 0	42 0 0
856	25	Do., B shares	18 15 0	7 10 0	25 0 0
260	20	Godalming	20 0 0	5 0 0	20 0 0
300	5	Do., new shares	5 0 0	5 0 0	5 0 0
100	20	Do., do.	8 0 0		
100	5	Do., do.	2 0 0		
621	5	*Gomersal*	5 0 0	6 0 0	6 7 6
		Gorleston & Sthdn.			
855	25	*Gosport* . . [*Dist. Grange & Cartmel*	25 0 0	9 0 0	37 10 0
450	20	Grantham	20 0 0	7 0 0	28 0 0
1000	20	*Gravesend*	20 0 0	5 0 0	21 0 0
		Grays Thurrock			
643	5	Gt. Berkhampstd.	5 0 0	6 0 0	5 10 0
1000	10	*Great Grimsby*	10 0 0	10 0 0	17 0 0
1000	6¼	Do., new shares	4 10 0	10 0 0	8 2 6
700	5	Great Harwood	5 0 0	4 5 0	
280	5	Do., new shares	1 0 0		
210	10	Great Marlow	10 0 0	5 0 0	10 0 0
		Great Stanmore			
		Great Torrington			
450	5	Great Wigston	5 0 0	6 0 0	
150	1	Do., new shares	1 0 0	6 0 0	
1300	10	Guernsey	9 0 0	10 0 0	17 0 0
352	25	*Guildford*, A sh.	25 0 0		
352	3	Do., B shares	3 0 0		
		Do., new shares			
25	100	Guisborough	60 0 0	10 0 0	
		Hadleigh Cons. (L)			
240	5	Hadlow (Limited)	5 0 0		
140	10	Hailsham	10 0 0	6 0 0	10 0 0
40	50	Halesowen	50 0 0	6 0 0	
300	5	Halesworth	5 0 0	7 10 0	6 5 0
240	5	Haltwhistle (Lim.)	5 0 0	4 10 0	5 0 0
		Hampton			
1000	10	*Harrogate*	10 0 0	7 10 0	15 0 0
1000	3¾	Do., new shares	3 6 8	7 10 0	5 0 0
900	10	Do., do.	8 0 0	7 10 0	9 10 0
6800	5	*Hartlepool G. & W.*	5 0 0	7 0 0	6 17 6
3322	5	Do., new shares	5 0 0	7 0 0	6 17 6
9878	5	Do., do.	1 10 0	7 0 0	
1000	1	Hartley Wintney, Harwich	1 0 0	2 10 0	21s. to 23s.
662	6	*Haslingden*	6 0 0	10 0 0	10 0 0
343	6	Do., A shares	4 0 0	10 0 0	6 0 0
1650	25	*Hastings & St. L.*	25 0 0	8 0 0	
1500	20	Do.	12 0 0	7 0 0	
180	10	Hatfield			
		Harlow and Sawbridgeworth			
500	5	Havant	5 0 0	3 0 0	5 0 0
120	10	Haverhill	10 0 0	5 0 0	10 0 0
840	5	Hawick	5 0 0	10 0 0	10 0 0
244	5	Haworth	5 0 0		5 5 0
		Hay (L.), Brecon			
		Haydon Bridge			
7500	1	Hebden Bridge	1 0 0	10 0 0	1 10 0
170	10	Heckington (Lim.)	10 0 0		10 0 0
		Heckmondwike			
120	10	Hedon (Limited)	10 0 0	3 0 0	
145	12	Helston	12 0 0	9 0 0	
250	10	Hemel Hempstead	10 0 0	4 0 0	7 0 0
300	10	Henley (Limited)	10 0 0	6 0 0	10 0 0
		Hereford. £10,000		4 10 0	
300	10	Herne Bay	10 0 0	6 0 0	11 0 0
1300	10	*Hertford*	8 0 0	7 10 0	12 0 0
		Hesale (L.) £1500			
470	10	Hexham	10 0 0	8 0 0	14 0 0
400	25	*Heywood*	25 0 0	7 10 0	40 0 0
400	25	Do., new shares	25 0 0	7 10 0	37 10 0
400	25	Do., C shares	10 0 0	7 10 0	16 0 0
160	10	Higham Ferrers	10 0 0	7 0 0	12 0 0
		Highworth, Wilts.			
520	5	High Wycombe	5 0 0	6 0 0	6 16 0
300	10	Hinckley	10 0 0	7 10 0	10 0 0
600	5	Hindley, Lancash.	3 0 0		3 0 0
200	20	Hitchin	20 0 0	8 0 0	
200	5	Do., new shares	5 0 0	8 0 0	
880	5	Hoddesden	5 0 0	7 0 0	6 0 0
		Holbeach			
600	20	*Holmfirth*	19 0 0	6 10 0	21 10 0
960	5	Holyhead	5 0 0	6 0 0	6 2 6
		Holywell (*see* Brit.			
98	25	Honiton . [Prov.)	25 0 0	3 12 0	20 0 0
1250	1	Honley (Limited)	1 0 0	5 0 0	1 0 0
6	500	Horncastle	£500		
		Hornsey (Lim.)			
1200	2½	Horsforth	2 10 0		2 10 0
193	20	Horsham	20 0 0	10 0 0	26 0 0
	10	Houghton-le-Sprg.	10 0 0	8 0 0	
		Howden			
1700	20	*Huddersfield*	20 0 0	10 0 0	37 5 0
250	20	Do., new shares	15 0 0	10 0 0	
		Hull. [*see* B. Prov.			
		Hull-Sculcoates			
210	10	Hungerford	10 0 0	5 0 0	10 0 0
1200	10	*Huntingdon*	10 0 0	8 0 0	16 5 0
		Hurstperpoint			
600	10	Huyton & Roby	10 0 0	7 0 0	12 2 6
2500	10	*Hyde*	9 0 0	5 10 0	10 15 0
400	10	Hythe & Sandgate	10 0 0	6 0 0	10 15 0
		Idle & Eccleshill(*see* Ilford . [Airdale)			
198	12	Ilfracombe	2 0 0	4 0 0	8 to 9
560	6¼	Ilkestone	6 5 0	11 4 0	8 0 0
		Ilkley			
		Ilminster			
250	5	Ingatestone (Lim.)	5 0 0	1 10 0	
2800	10	*Ipswich*	10 0 0	10 0 0	18 0 0
1400	10	Do.	7 10 0	7 10 0	
		Ironbridge			
180	10	Irthlingborough	10 0 0	7 0 0	10 0 0
800	30	*Isle of Thanet* (Margate & Ramsgate.)	30 0 0	10 0 0	60 0 0
		Jersey, St. Helier's			
		Kegworth			
363	5	Kelvedon (Lim.)	5 0 0		
1842	10	*Kendal United Gas and Water*	9 0 0	10 0 0	17 0 0
380	20	Do., preference	20 0 0	7 10 0	32 0 0
290	10	Kenilworth (Lim.)	10 0 0	4 0 0	10 0 0
400	5	Keswick	5 0 0	5 0 0	4 0 0
228	25	Kettering	25 0 0	6 10 0	30 0 0
		Ketton (L.) Rutld.		7 0 0	
		Keynsham			
500	5	Kibworth	5 0 0	6 0 0	7 0 0
		Kiddrmstr, £10,000		5 0 0	
800	5	Kidsgrove	5 0 0	12 0 0	7 10 0
150	10	Kimbolton	10 0 0	7 0 0	12 0 0
140	7	Kingsbridge	7 0 0		10 to 11
270	5	King's Cliffe	5 0 0	5 10 0	5 0 0
		Kingstn-on-Tham.			
		Kingswinford District (Limited)			
		Kington, Hereford			
400	5	Kinver, Staffordsh.	5 0 0		5 0 0
		Kirby Lonsdale			
		Kirkburton			
400	5	Kirkby Stephen (L)	5 0 0		
330	5	Kirkham, Lanc.	5 0 0	4 0 0	5 0 0
330	2½	Do., new shares	2 10 0	4 0 0	2 10 0
200	10	Kirton-in-Lindsey	10 0 0	5 0 0	10 10 0
200	5	Knighton . . (L.)	5 0 0		
1000	10	*Knottingley*			
670	5	Knutsford Gas and Water (Limited)	5 0 0	8 0 0	5 10 0
319	5	Do.,	3 0 0	8 0 0	3 10 0
470	31¼	*Lancaster*	31 10 0	7 2 10	48 0 0
470	6 gs.	Do.	6 6 0	7 2 10	9 12 0
564	15½	Do.	15 15 0	7 2 10	24 0 0
50	25	Langport	25 0 0	4 0 0	15 0 0
		Launceston			
		Lea Bridge (*see* County & Gen)			
1500	20	*Leamington Priors*	20 0 0	8 0 0	28 0 0
1500	20	Do., new shares	8 0 0	7 0 0	9 0 0
213	10	Leatherhead	10 0 0	5 0 0	10 0 0
		Ledbury			
		Leeds Company—			
190200	Sk.	Consolidated stk.	£100	6 0 0	113 to 114
6790	5	Do., new	1 0 0	6 0 0	1 12 6
		Leeds New Comp—			
450007		Old stock	£100	10 0 0	178 to 180
117500		New do.	£100	6 0 0	106 to 108
6500	5	Do., B shares	2 0 0	6 0 0	2 5 0
		Leeswood (Limd.)			
3900	13	*Leicester*	13 0 0	10 0 0	23 0 0
5000	10	Do., new shares	10 0 0	7 10 0	15 0 0
		Leigh		7 0 0	
476½	21	Leighton Buzzard	21 0 0	8 0 0	30 0 0
500	10	Leominster	10 0 0	5 0 0	9 10 0
330	25	Lewes, A shares	25 0 0	8 0 0	31 5 0
644	5	Do., B shares	5 0 0		6 5 0
245	5	Leyburn, Yorksh.	5 0 0		6 0 0
		Leyland, Lancash.			
250	20	Lichfield	20 0 0	10 0 0	40 0 0
320	25	*Lincoln*	25 0 0	10 0 0	70 0 0
300	5	Lindfield (Limited)	5 0 0	8 0 0	5 0 0
240	5	Liskeard	5 0 0	7 10 0	6 0 0
		Littleborough			
240	5	Littlehampton	5 0 0	10 0 0	5 0 0
	Sk.	*Liverpool United*	£100	10 0 0	197 0 0
	25	Do., ¼ share	25 0 0		52¼ to 52½
259	5	Llandovery (Lim.)	1 10 0	7 0 0	
1212	10	Llandudno Gas and Water (Lim.)	10 0 0	7 0 0	11 5 0
		Llanelly . . £3000			
		Llanfyllin (L.) £2000			
		Llangollen			
250	10	Llanrwst (Limited)	9 15 0	5 0 0	9 15 0
272	5	Loddon	5 0 0	3 0 0	5 0 0
		Long Buckby (L.)			
120	10	Long Sutton (Lim.)	10 0 0	7 10 0	11 to 12
2000	10	*Longton*	10 0 0	8 0 0	7 10 0
		Longwood, near Huddersfield			
250	5	Lostwithiel	5 0 0	4 0 0	6 0 0
250	1	Do., new shares	1 0 0	5 0 0	1 10 0
1422	6	Loughborough	6 0 0	10 0 0	11 15 0
240	25	*Louth*	25 0 0	10 0 0	35 0 0
2500	10	*Lowestoft Gas & Water*			
611	5	Ludlow Union	5 0 0	5 0 0	5 0 0
250	5	Do., pref. shares	5 0 0	5 0 0	
640	10	*Luton*	10 0 0	7 10 0 & Bns.	12 0 0
640	5	Do., preferential	5 0 0	4 0 0	5 0 0
640	5	Do., new shares	5 0 0	7 10 0 & Bns.	6 0 0
100	20	Lutterworth	20 0 0	6 5 0	25 0 0
		Lydney (L.) £3000			
63	20	Lyme Regis	20 0 0	4 0 0	20 0 0
120	25	Lymington	25 0 0	5 0 0	25 0 0
400	10	Lymm	9 0 0	6 0 0	10 0 0
300	10	Maidenhead	10 0 0	5 0 0	10 0 0
500	25	*Maidstone*, A sh.	25 0 0	10 0 0	45 0 0
500	25	Do., B shares	25 0 0	4 0 0	20 0 0
	25	Do., new shares	25 0 0	7 10 0	
204	23	Maldon	23 0 0	7 0 0	27 0 0
200	10	Malmesbury	10 0 0	2 10 0	5 15 0
		Malpas (Limited)			
825	10	Malton	10 0 0		
793	7	Do.	7 0 0		
		Malvern Link			
		Manningtree			
		Mansfield . £5000		10 0 0	
150	10	Mansfield Woodhse	10 0 0		
		March . [Thanet)			
		Margate (*see* I. of			
		Market Drayton			
132	25	Market Harboro'	25 0 0	7 0 0	35 0 0
		Market Weighton			
		Markyate St. (L.)			
		Marlborough			
150	10	Marsden(Lim.)	10 0 0	5 0 0	10 0 0
671	20	Maryport	14 0 0		14 5 0
600	5	Matlock (Lim)	5 0 0	6 0 0	
508	5	Matlock Bridge, Matlock Bank, & Matlk. Town (L.)	5 0 0	6 0 0	
200	2	Measham (Lim.)	1 12 6	5 0 0	
220	10	Melbourne	10 0 0	6 0 0	12 0 0
		Melksham			
934	2	Meltham	2 0 0	4 10 0	
		Melton Mowbray			
50	10	Mere	10 0 0		
		Merthyr Tydvil			
120	10	Middleham	1 0 0	5 0 0	10 0 0
		Middleton-in-Teesdale			
400	5	Midhurst (Lim.)	5 0 0	2 10 0	5 0 0
		Midsmmr. Norton			
198	5	Mildenhall	5 0 0	5 0 0	
300	5	Milnthrpe(L) £1500	4 10 0	3 6 8	
184	10	Milverton (Lim.)	10 0 0	5 0 0	10 0 0
2000	5	*Mirfield*	5 0 0	5 0 0	6 5 0
		Mitcham & Wimb.			
650	5	Mold Gas & Water	5 0 0	7 10 0	6¼ to 6½
700	10	Monmouth Gas & Water	10 0 0	5 0 0	10 0 0
250	5	Montgomery (L.)	5 0 0		
150	10	Moreton-in-Marsh	9 2 6	4 0 0	9 2 6
1000	5	*Morley*, nr. Leeds	5 0 0	10 0 0	8 10 0
1000	2	Do.	2 0 0	10 0 0	3 8 0
220	16	Morpeth	16 0 0	5 0 0	17 10 0
		Mossley			
		Mottram			
		Nayland			
		Neath			
		Neath New			
185	10	Needham Market	10 0 0	4 0 0	
		Nethrthng(L.) £700			
		Newark		10 0 0	
		Newburn			
250	20	Newbury	20 0 0	5 0 0	20 0 0
		Newcstle & Gatshd.			
		Nwcstle-un.-Lyne			
250	5	Newent	5 0 0		
		Newhaven, Sussex			
		New Malton			
600	5	Newmarket	5 0 0	4 0 0	4 0 0
366	2	Do., preference	2 0 0	6 0 0	2 0 0
		New Mill(L.) £7000			
200	20	*New Mills & Hayfield*	20 0 0	7 10 0	
70	20	Newnham (Lim.)	20 0 0	10 0 0	37 10 0
		Newport Pagnell			
360	35	*Newport, Mon.*, A shares	35 0 0	9 0 0	50 0 0
540	35	Do., B shares	35 0 0	7 10 0	42 10 0
		Newport, Salop			
250	5	New Romney (Ld.)	5 0 0	5 0 0	5 0 0
		Newton Abbott			
198	10	Newtown, Mont.	10 0 0	6 0 0	10 0 0
		Northallerton			
777	20	*Northampton*, A shares	20 0 0	10 0 0	34 0 0
777	20	Do., B shares	20 0 0	4 0 0	13 0 0
777	20	Do., C shares	20 0 0	7 10 0	25 0 0
2331	5⅔	Do.	3 13 4	7 10 0	4 5 0
		North Bierley			
		Northfleet (*see* Co. & General)			
		Northleach			
2914	5	North Shields	5 0 0	5 0 0	6¼ to 7½
120	10½	North Walsham	10 10 0	5 0 0	10 15 0
371	15	Northwich	15 0 0	5 0 0	15 0 0
		Norwich (*see* Brit. Provincial)			
4600	50	*Nottingham*	50 0 0	5 10 0	60 0 0
	50	Do., new shares	50 0 0	5 10 0	63 0 0
268	8	Nuneaton (Lim.)	8 0 0	5 0 0	7 10 0
125	8	Do., new shares	8 0 0	5 0 0	7 10 0
		Oaken Gates, Salop			
240	5	Oakhampton(Lim.)	5 0 0		
200	10	Odiham	10 0 0	6 0 0	10 10 0
320	5	Old Goole (Lim.)	5 0 0	6 0 0	5 0 0
		Olney			
360	10	*Ormskirk*, old sh.	10 0 0	8 0 0	14 0 0
1080	10	Do., new shares	4 10 0	8 0 0	6 4 6
2400	5	*Ossett & Horbury*	5 0 0	8 0 0	9 0 0
		Oswestry			
		Otley, Yorkshire			
80	25	Oundle	25 0 0	7 0 0	25 0 0
600	15	*Over Darwen*, Original	15 0 0	5 0 0	19 0 0
660	15	Do., A shares	15 0 0	5 0 0	19 0 0
1200	15	Do., B shares	7 10 0	5 0 0	10 0
1694	1	Over & Whrtn. (L)	1 0 0		1 2 0
320	5	Owston Ferry (L.)	5 0 0	5 0 0	5 0 0
120	150	*Oxford*	£150	9 0 0	290 to 300
1527	5	Padiham	5 0 0	6 0 0	6 0 0
338	2½	Painswick	2 10 0		2 10 0
		Pangbourne(L)			
		Pately Br., Yorksh.			
300	5	Peel, Isle of Man	5 0 0	7 0 0	6 to 7

No. of Shares issued.	Amount per Share.	Name of Company.	Amount paid up per Share.	Div. per Cent. per Annum.	Price per Share.
	£		£ s d	£ s d	£ s d
		Pembroke (*see* Co. and General)			
500	20	*Peniston*			
250	20	Penrith	15 0 0	6 10 0	21 0 0
153	20	Penzance	20 0 0		15 0 0
		Pershore			
320	5	Petersfield	5 0 0	5 0 0	
300	10	Petworth	10 0 0	9 17 6	16 0 0
1250	2	Pewsey (Limited)	2 0 0	6 0 0	2 0 0
		Pickering			
2500	10	*Plymouth & Stonehouse*	10 0 0	10 0 0	19 0 0
2500	10	Do., new shares	10 0 0	7 10 0	14 0 0
2500	10	Do., new shares	3 0 0	7 10 0	4 10 0
160	10	Pocklington	10 0 0		5 0 0
		Ponder's End & Enfield Highway (Limited)			
		Pontefract			
		Pontypridd		4 0 0	
400	10	Poole	10 0 0	10 0 0	15 0 0
344	2	Do., new shares	2 0 0	10 0 0	3 0 0
643	5	Port Madoc (Lim.)	5 0 0	5 0 0	
		Port Talbot			
600	53	*Portsea Island*	53 0 0	8 0 0	60 0 0
600	50	Do., new shares	50 0 0	8 0 0	57 0 0
600	50	Do., new shares	49 0 0	8 0 0	56 0 0
9000	Sk.	Do.		5 0 0	92 0 0
120	10	Potton, Bedfordsh.	10 0 0	5 0 0	10 0 0
400	10	Prescott	10 0 0	5 0 0	
		Presteign			
120000	Sk.	*Preston*	All.	10 0 0	210 to 215
1000	10	Provincial (Hull)	8 0 0		8 0 0
600	20	*Pudsey*	20 0 0	7 10 0	30 0 0
600	6⅔	Do., new shares	4 13 4	7 10 0	4 13 4
93	20	Pwllheli	20 0 0	2 10 0	25 0 0
600	5	Quorndon & Mountsorrel	5 0 0	7 0 0	12 0 0
900	10	*Radcliff & Pilkington*, No. 1	10 0 0		
2100	10	Do., No. 2	6 0 0		
200	20	Ramsay, I. of Man	20 0 0	6 10 0	23 0 0
		Ramsey, Hunts			
		Ramsgate (*see* I. of Thanet)			
		Rastrick			
		Rawmarsh			
20000	Sk.	*Reading*	100 0 0	8 0 0	120 5 0
5000	,,	Do.	100 0 0	5 0 0	100 10 0
1000	10	Do.	10 0 0	7 0 0	11 0 0
500	10	Do., preference	10 0 0	5 0 0	10 10 0
		Redbourn (L) £1100			
400	5	Redcar	5 0 0	4 0 0	5 0 0
1200	5	*Redhill*	5 0 0	6 0 0	5 5 0
		Redruth			
		Reigate			
1200	1	Repton (Limited)	1 0 0	5 0 0	1 1 0
2000	10	Richmond, Sry. (L)	10 0 0	7 0 0	15 0 0
600	5	Rhosllanerchrugog	3 0 0	7 10 0	5 0 0
		Rhymney (Lim.)			
400	5	Rickmansworth	5 0 0		5 0 0
180	10	Ringwood	10 0 0	5 0 0	10 0 0
		Ripley			
		Risborough			
		Robin Hood's Bay			
280	50	*Rochester & Chat.*		6 0 0	
		Rochford			
2600	5	Romford	5 0 0	6 0 0	5 5 0
220	10	Romsey	10 0 0	7 10 0	12 10 0
7500	Sk.	*Rotherham*,			
		A stock	100 0 0	10 0 0	186 to 190
2500	Sk.	Do., B stock	100 0 0	8 0 0	152 to 154
600	20⅔	Do., new shares	10 0 0	8 0 0	14½ to 15
		Rothwell			
350	10	Royston	10 0 0	5 0 0	9 10 0
150	20	Rugby	20 0 0	10 0 0	
150	5	Do., ¼ shares	5 0 0	10 0 0	
150	6⅔	Do., ¼ shares	6 13 4	10 0 0	
150	10	Do., new shares	10 0 0	10 0 0	
150	2½	Do., do.	2 10 0	10 0 0	
150	3¾	Do., do.	3 6 8	10 0 0	
430	10	Rugely	10 0 0	5 0 0	10 10 0
2400	5	*Runcorn*	5 0 0	7 10 0	
2400	5	Do., new shares	3 5 0	7 10 0	
114	31½	Ruthin	31 5 0	6 16 0	40 0 0
1500	12	*Ryde*	12 10 0	8 0 0	15 0 0
500	5	Rye	5 0 0	6 0 0	6 0 0
		Saddleworth			
225	20	Saffron Walden	20 0 0	5 0 0	20 0 0
225	20	Do.	10 0 0		
1400	5	St. Alban's Gas & Water (Lim.)	5 0 0	5 0 0	5 5 0
320	5	St. Asaph (Lim.)	5 0 0		
		St. Austell			
		St. Bees (Lim.)			
		St. Colomb			
3000	10	*St. Helen's*	10 0 0	10 0 0	18 10 0
		St. Ives, Cornwall			
		St. Mary's Cray			
880	12½	*Salisbury*	12 10 0	10 0 0	17 10 0
160	12½	Do., preference	12 10 0	6 0 0	15 0 0
341	10	Sandbach	10 0 0	5 0 0	12 10 0
		Sandown (Lim.)			
381	10	Sandwich	10 0 0	5 0 0	
		Sandy, Beds			
100	10	Saxmundham	10 0 0	5 0 0	
2000	10	*Scarborough*	10 0 0	7 0 0	13 0 0
1000	10	Do.	6 0 0	7 0 0	12 2 6
240	5	Sedburgh	5 0 0		
300	16	Selby	16 0 0	7 10 0	
140	5	Settle (Limited)	3 10 0	5 0 0	
290	10	Sevenoaks	10 0 0	4 0 0	10 0 0
300	10	Shaftesbury (Lim.)	10 0 0	5 0 0	8½ to 9
565	5	Sheepshed (Lim.)	5 0 0	6 0 0	6 0 0
135000	Sk.	*Sheffield United*,			
		A stock	100 0 0	10 0 0	194½–195½
129984	Sk.	Do., B stock	100 0 0	10 0 0	193 to 194
2625	30	Do., C shares	20 0 0	10 0 0	46 to 46½
600	5	Shefford (Limited)	4 0 0		
		Shelton, Potteries (*see* Brit. Prov.)			
2900	5	Sheppy, Sheerness	5 0 0	10 0 0	6 15 0
800	5	Do., pref. sh.	5 0 0	4 0 0	
400	5	Do., A shares	1 0 0	10 0 0	1 5 0
350	10	Shepton Mallet	10 0 0	7 10 0	10 0 0
1000	5	Sherborne	5 0 0	7 10 0	5 0 0
		Shiffnal, Salop			
1000	5	*Shipley*	5 0 0	6 0 0	7 10 0
150	10	Shipston-on-Stour	10 0 0	4 0 0	
		Shirley & Freemantle, Hants			
240	25	Shotley Br. (Lim.)	25 0 0	7 0 0	26½ to 27
240	10	Do., new shares	10 0 0	7 0 0	
1000	10	*Shrewsbury*, A sh.	10 0 0	10 0 0	20 0 0
1000	10	Do., B shares	10 0 0	5 0 0	10 0 0
1000	10	Do., new shares	10 0 0	7 10 0	15 0 0
		Sible Hedingham			
7000	Sk.	*Skipton*	100 0 0	9 0 0	150 0 0
400	2½	Do., new shares	2 10 0	5 0 0	3 0 0
		Slaithwaite			
250	20	Sleaford	20 0 0	5 0 0	20 0 0
340	5	Snaith	5 0 0		4 0 0
		Soham			
150	10	Somerton	10 0 0		
354	5	Southam	5 0 0		
1000	50	*Southampton*	50 0 0	10 0 0	
		Southborough			
		Southend, Essex			
		Southgate & Col. H.			
220	10	South Molton	10 0 0	5 10 0	7 10 0
		South Petherton (L)			
2000	10	*South Shields*	10 0 0	9 0 0	15 to 17
248	10	Southwell (Lim.)	10 0 0	5 0 0	11 to 11¼
300	5	Southwold	5 0 0	5 0 0	5 0 0
1470	1	Spennymoor (Lim.)	1 0 0		
400	5	Spilsby	5 0 0		
		Spittal, Berwick-on-Tweed			
2000	6⅔	*Stafford*	6 13 4	10 0 0	10 0 0
2000	6⅔	Do., new shares	4 0 0	8 0 0	5 0 0
178	5	Staindrop	5 0 0	6 0 0	5 0 0
248	25	Staines & Egham	25 0 0	6 0 0	26 to 27
		Staley Bridge		10 0 0	
225	50	*Stamford & St. Martin's*	50 0 0	9 0 0	75 0 0
150	10	Staveley (Limited)	10 0 0	5 0 0	11 10 0
300	5	Stevenage	5 0 0	5 0 0	5 0 0
2500	10	*Stoke, Fenton &*	10 0 0	10 0 0	
500	10	Do., [*Longton*	2 0 0	10 0 0	
400	5	Stone, Stafford	5 0 0	5 0 0	6 0 0
220	10	Stoney Stratford	10 0 0	4 10 0	9 0 0
		Storrngtn (L) £1000			
		Stourbridge, £5000			
1100	1	Stow-on-the-Wold	1 0 0	5 0 0	1 0 0
150	20	*Stratford-on-Avon*	20 0 0	10 0 0	40 0 0
150	5	Do., new shares	5 0 0	10 0 0	10 0 0
375	8	Do., preference	8 0 0	5 10 0	8 10 0
750	5	*Stretford*	5 0 0	9 0 0	5 0 0
		Stroud			
261	20	Sudbury	20 0 0	6 10 0	21 10 0
		Sunbury (L), Mid.			
18120	5	*Sunderland*	5 0 0	9 0 0	8 15 0
20000	5	Do., new shares	5 0 0	8 10 0	8 5 0
200	10	Sutton Coldfield (L)	10 0 0		10 0 0
350	10	Sutton-in-Ashfield	10 0 0	7 10 0	12 10 0
		Sutton Southcoates & Drypool, Hull	20 0 0		23 to 24
		Sutton, Surrey			
		Sutton Valence			
600	5	Swadlincote	5 0 0	5 0 0	6 0 0
169	10	Swaffham	10 0 0	5 0 0	7 0 0
240	25	*Swansea*	25 0 0	10 0 0	45 to 47
1280	25	Do., new shares	25 0 0	7 10 0	35 0 0
		Swindon			
		Swindon New (L.			
200	10	Swineshead (L	0 0 0	5 0 0	10 5 0
1000	5	Swinton & M	5 0 0	7 0 0	7 0 0
180	10	Syston . . boro'	10 0 0		10 0 0
276	5	Tadcaster	5 0 0	5 0 0	3 0 0
		Tamworth			
		Taporley (Lim.)			
		Tattershall & Coningsby (Lim.)			
2800	5	*Taunton*	5 0 0	6 0 0	6 0 0
2800	1¼	Do., new shares	1 10 0	6 0 0	
800	6⅔	Tavistock	3 3 9	6 0 0	5 10 0
200	5	Tenbury Union	5 0 0	5 0 0	5¼ to 6
150	10	Tenterden	10 0 0	4 0 0	8 0 0
181	10	Tetbury, Gloster	9 0 0	8 5 0	18 0 0
		Tewkesbury			
200	10	Thame	10 0 0	5 0 0	10 0 0
250	10	Thetford	10 0 0	6 0 0	10 to 11
150	10	Thornbury (Lim.)	10 0 0	4 0 0	
80	1	Do., new shares	1 0 0	4 0 0	
356	5	Thorne	5 0 0		4 0 0
160	10	Thrapston (Lim.)	10 0 0	5 0 0	10 0 0
		Tideswell (L.) £2000			
1885	5	Todmorden (Lim.)	5 0 0	7 10 0	7 10 0
1870	5	Do., B shares	3 0 0	7 10 0	4 10 0
600	2½	Topsham (Lim.)	2 10 0	5 0 0	
		Torpoint (Lim.)			
		Torquay			
		Torrington, Devon			
		Totnes			
		Totnes Consumers			
5000	5	*Tottenham & Edmonton*	5 0 0	8 0 0	6 0 0
150	10	Towcester	10 0 0	5 0 0	10 0 0
		Town-Malling			
300	5	Towyn (L) Merion	5 0 0		5 0 0
275	10	Tring	10 0 0	5 0 0	10 0 0
		Trowbridge (*see*			
320	25	Truro . [Brit. P.	25 0 0	10 0 0	40 to 45
320	5	Do., new			
		Tunbridge			
2000	10	*Tunbridge Wells*	10 0 0	10 0 0	19 0 0
100	10	Tuxford	10 0 0	5 0 0	12 0 0
		Twyford (Limited)			
		Ulverston			
		Uppingham			
240	5	Upton-on-Severn	5 0 0	5 0 0	5 0 0
400	5	Usk (Limited)	5 0 0	7 10 0	6 12 6
250	10	Uttoxeter	10 0 0	5 0 0	13 0 0
		Uxbridge & Hill.			
1500	20	*Ventnor*	10 0 0		
160	10	Wainfleet (Lim.)	10 0 0		8 0 0
1000	25	*Wakefield*	25 0 0	10 0 0	44 0 0
3660	5	Do.,	5 0 0	10 0 0	8 16 0
1732	5	Do., new shares	5 0 0	7 10 0	6 15 0
400	5	Walker & St. Anthony (L.)	5 0 0		7¾ to 8½
		Walker & Wall. Un.			
300	10	Wallingford	10 0 0	5 0 0	8 0 0
		Walton-on-Thame. (*see* Co. & Gen.)			
200	10	Wantage	9 0 0	5 0 0	10 10 0
		Ware (*see* C. & G.)			
100	10	Wareham	10 0 0	3 10 0	8 0 0
2000	1	Warkwth & Amble	1 0 0	3 10 0	
200	25	Warminster	25 0 0	6 0 0	28 0 0
200	25	*Warrington*	20 0 0	10 0 0	37 0 0
900	20	Do., new shares	15 0 0	10 0 0	27 0 0
		Warth			
		Warwick. £15,000		6 0 0	
		Watford			
400	10	Weedon (Limited)	10 0 0	6 10 0	12 10 0
400	3	Do., new shares	1 10 0	6 10 0	1 17 6
111	25	Welchpool, Montg.	25 0 0	5 0 0	25 0 0
200	25	Wellingborough	25 0 0	5 0 0	25 0 0
450	10	Wellington, Salop	10 0 0	7 10 0	12 10 0
100	30	Wellington, Som.	30 0 0	6 0 0	30 0 0
160	25	*Wells*, Somerset	25 0 0	10 0 0	
		Wem (Lim.) £2000			
		W. Auckld. & St. Helen's, Auckld (L)			
160	10	Westbury	10 0 0		
		West Cowes			
225	10	Westerham (Lim.)	10 0 0	5 0 0	11 0 0
454	5	West Malling Gas and Water	5 0 0	3 0 0	4 10 0
200	20	*Weston-sup.-Mare* A shares	20 0 0	10 0 0	30 0 0
200	20	Do., B shares	20 0 0	7 10 0	20 0 0
800	20	Do., C shares	6 0 0	7 10 0	7 13 0
200	5	Wetherby	5 0 0		1 10 0
2000	10	*Weymouth*			
		Whaley Bridge			
2300	1	Whitchurch, Hants	0 10 0	5 0 0	
400	25	Whitehaven	25 0 0	2 0 0	14½ to 15
		Whitehaven New			
		Whitstable			
		Whittington			
250	10	Whittlesea	10 0 0	5 0 0	11 0 0
300	10	Whitwick & Coalville	10 0 0		10 0 0
1200	5	*Whitworth Vale*	5 0 0	4 0 0	7 0 0
1200	5	Do., new shares	4 7 6	4 0 0	6 7 6
		Widnes Gas & Wtr.			
1250	10	*Wigan*	10 0 0	10 0 0	20 0 0
1250	10	Do., preference	10 0 0	5 0 0	10 0 0
2500	10	Do., new shares	5 0 0	7 10 0	8 15 0
400	5	Wigston	5 0 0	6 0 0	5 0 0
		Wigton, Cumberd.			
1020	5	*Willenhall*, A shares	5 0 0		
1020	54*s.*	Do., B shares	2 14 0	5 0 0	
		Do., new shares			
		Wilton			
240	10	Wimborne Minster	10 0 0		
130	10	Wincanton	10 0 0	7 0 0	
		Winchcombe £1500			
		Winchester G. & W.			
		Windermere Dist.			
1200	20	Windsor (Limited)	20 0 0	7 10 0	24 0 0
141	10	Winslow	10 0 0	6 0 0	10 0 0
120	10	Winterton (Lim.)	10 0 0	5 0 0	
120	5	Do., new shares	5 0 0	5 0 0	
200	10	Wirksworth	10 0 0	5 0 0	10 0 0
		Wisbeach			
		Witham			
		Witney			
400	5	Wiveliscombe (L.)	5 0 0	6 0 0	5 5 0
		Wivenhoe (L) £2000			
200	10	Woburn	10 0 0	5 0 0	11 0 0
		Woking			
210	10	Wokingham	10 0 0	5 0 0	
4448	10	*Wolverhampton*	10 0 0	10 0 0	18 10 0
4448	10	Do., new shares	7 0 0	10 0 0	14 5 0
550	10	Woodbridge (Lim.)	10 0 0	8 0 0	
660	2½	Woodstock	2 10 0	5 0 0	
		Woodhouses			
200	7	Wooler	7 0 0		
2400	5	*Woolwich Consrs.*	5 0 0	10 0 0	8 0 0
2400	5	Do., do.	5 0 0	7 10 0	7 0 0
4800	5	Do., do.	3 0 0	7 10 0	4 0 0
		Woolwh. Equitable			
		Wootton Bassett			
2400	10	*Worcester*	10 0 0	10 0 0	14 7 6
		Workington			
600	10	*Worksop*	10 0 0	8 0 0	
600	5	Do., new shares	5 0 0	7 0 0	
245	50	Worthing	50 0 0	4 0 0	40 0 0
		Worsboroughdale & Worsboro.			
270	12	Wotton-un.-Edge	12 0 0	4 0 0	40 0 0
600	5	Wrexham, A sh.	5 0 0	7 10 0	5 0 0
600	5	Do., B shares	5 0 0	5 0 0	5 0 0
600	5	Do., C shares	3 10 0	5 0 0	3 10 0
		Writtle			
		Wye, Kent			
		Wylam			
400	5	Wymondham	5 0 0	6 10 0	5 0 0
		Yarmouth, I. of W.			
800	30	*Yarmouth, Norflk.*	30 0 0	7 10 0	
800	7½	Do., ½ shares	7 10 0	7 10 0	
1675	4	Yeadon & Guiseley	4 0 0	5 0 0	4 8 0
1675	2	Do., new shares	0 5 0	5 0 0	0 5 6
140	30	Yeovil	30 0 0	6 0 0	30 0 0
140	10	Do., new shares	10 0 0	6 0 0	10 0 0
		York Town			
15000	10	*York United*	5 0 0	10 0 0	10 15 0
		Yoxford			

No. of Shares issued.	Amount per Share.	Name of Company.	Amount paid up per Share	Div. per Cent. per Annum.	Price per Share.
	£	**SCOTLAND.**	£ s d	£ s d	£ s d
26000	2½	Aberdeen	2 10 0	10 0 0	5 1 0
		Abernethy			
		Aberlour(L.) £650			
500	10	Airdrie	10 0 0	9 0 0	14 10 0
		Alloa			
		Alva, nr. Stirling			
		Alyth			
600	5	Annan	5 0 0	5 0 0	5 0 0
1600	1	Anstruther & Cellardyke	1 0 0	8 0 0	1 6 0
825	20	Arbroath	20 0 0	7 10 0	30 0 0
100	20	Ardrossan	20 0 0	5 0 0	20 0 0
658	1	Auchinleck	1 0 0		
381	5	Auchterarder	5 0 0	7 10 0	7 10 0
750	2	Auchtermuchty	2 0 0	6 0 0	2 10 0
2932	5	Ayr	5 0 0	6 0 0	5 16 0
4250	2	Ayr&NewtonCons.	2 0 0	6 0 0	2 2 0
300	10	Banff	10 0 0	6 0 0	11 0 0
2158	1	Barrhead	1 0 0	7 10 0	1 0 0
200	5	Bathgate	5 0 0	5 0 0	5 0 0
		Beith			
976	1	Bervie	1 0 0	5 0 0	
		Biggar			
739	5	Blairgowrie	5 0 0	8 0 0	7 0 0
		Blantyre (Lim.)			
400	6	Borrowstowness	6 0 0	5 0 0	6 0 0
540	5	Brechin	5 0 0	10 0 0	11 0 0
		Bridge of Allan			
8350	2	Broughty Ferry	2 0 0	6 0 0	2 4 6
		Callender			
		Campbelton			
250	4	Carluke, Lanark	4 0 0	7 10 0	4 0 0
178	5	Castle Douglas	5 0 0	5 0 0	5 0 0
2530	3	Coatbridge	3 0 0	10 0 0	5 0 0
200	5	Coldstream	5 0 0	6 0 0	5 0 0
		Collinsburgh			
1000	1	Comrie	1 14 8	4 10 0	1 14 8
		Corstorphine			
1200	1	Crail, Fife	1 0 0	5 0 0	1 0 0
2744	1	Crieff	1 0 0	10 0 0	1 15 0
600	1	Cullen	1 0 0	5 0 0	0 15 0
280	2½	Cumbernauld	2 10 0	5 0 0	2 10 0
200	5	Cumnock	5 0 0	6 0 0	6 0 0
600	5	Cupar Angus	5 0 0	7 0 0	6 10 0
250	10	Cupar Fife	10 0 0	10 0 0	18 10 0
300	10	Dalkeith	10 0 0	10 0 0	20 0 0
		Deanston			
750	2	Denny	2 0 0	6 5 0	2 5 0
		Denny Consumers			
	5	Dornoch			
500	1	Douglas	1 0 0	6 0 0	1 2 0
		Dufftown			
		Dumbarton			
400	20	Dumfries	14 0 0	7 2 10	14 10 0
391	5	Dunbar	5 0 0	6 0 0	5 10 0
		Dunblane			
1250	23⅓	*Dundee*	23 15 0	8 15 9	54 0 0
8000	5	*Dundee, New*	5 0 0	5 0 0	5 15 0
860	10	Dunfermline	10 0 0	10 0 0	16 10 0
		Dunkeld			
1750	2	Dunoon	2 0 0	6 0 0	2 3 0
		Dunse			
250	5	Dysart	5 0 0	7 10 0	6 10 0
2327	1	East Wemyss	1 0 0	6 0 0	1 2 0
750	1	Ecclefechan	1 0 0		
6000	25	*Edinburgh*	25 0 0	10 0 0	48 0 0
6400	2	*Edinburgh & Leith*	25 0 0	8 0 0	50 0 0
621	12	Elgin	12 0 0	6 0 0	13 0 0
1300	1	Elie & Earlsferry	1 0 0	7 5 0	1 3 0
		Ellon			
		Errol			
		Evemouth			
	14	Falkirk	14 0 0	7 0 0	14 0 0
		Falkirk, New			
632	2	Falkland	2 0 0	5 0 0	2 0 0
		Fettercairn			
2000	1	Ferry Port on Craig	1 0 0	6 5 0	1 3 0
581	1	Fochabers	1 0 0	5 0 0	1 2 0
1440	5	Forfar	5 0 0	7 10 0	7 12 6
360	5	Do., new shares	2 10 0	7 10 0	6 10 0
		Fort William			
2000	1	Fraserburgh	0 16 0	5 0 0	0 18 0
800	5	Galashiels	5 0 0	10 0 0	9 0 0
		Gatehouse, n. Fleet			
900	2½	Girvan	2 10 0	6 0 0	2 10 0
5200	25	*Glasgow*	25 0 0	10 0 0	50 0 0
3200	6¼	Do., ¼ shares	6 5 0	10 0 0	12 10 0
1000	25	Do., new shares	25 0 0	7 10 0	38 0 0
5000	10	*Glasgow City and Suburban*	10 0 0	10 0 0	20 0 0
5000	10	Do., new shares	10 0 0	7 10 0	15 0 0
		Grahamston			
190	10	Grangemouth	10 0 0	5 0 0	10 0 0
400	8¼	Haddington	8 5 0	7 10 0	11 10 0
		Hamilton			
	5	*Hamilton, New*	5 0 0	4 10 0	6 0 0
1460	5	Hawick	5 0 0	10 0 0	8 12 6
300	5	Helensburgh	5 0 0	7 10 0	7 10 0
2000	2	Holywood (Lim.)	2 0 0	7 10 0	3 0 0
1312	1	Huntly	1 0 0	7 10 0	1 5 0
250	5	Inverary	5 0 0	10 0 0	6 12 6
425	1	Inverkeithing	1 0 0	5 0 0	1 0 0
1200	10	*Inverness G.& Wr.*	10 0 0	7 10 0	13 10 0
2400	5	Do., new shares	5 0 0	7 10 0	
		Inverury			
	10	Irvine	10 0 0	10 0 0	14 0 0
	2½	Do.	2 10 0	10 0 0	3 12 6
300	5	Jedburgh	5 0 0	7 10 0	7 10 0
		Johnstone, Paisley			
		Kirkcudbright			
1300	1	Keith	1 0 0	5 0 0	0 11 0
600	5	Kelso	5 0 0	10 0 0	11 0 0
620	2	Kelsyth	2 0 0	5 0 0	2 0 0
950	1	Kennoway	1 0 0	5 0 0	1 1 0
1515	1	KettleFreuchie,&c.	1 0 0	5 0 0	5 0 0
600	25	Kilmarnock	25 0 0	7 10 0	30 0 0
600	25	Do., new shares	7 10 0	7 10 0	
334	5	Kincardine	5 0 0	5 0 0	4 10 0
		Kinghorn			
		Kingskettle, Fife			
		Kinross			
1200	5	Kirkcaldy	5 0 0	10 0 0	10 10 0
320	5	Kircudbright	5 0 0	5 0 0	5 0 0
997	3	Kirkintulloch	3 0 0	6 13 4	3 7 0
		Kirkwall			
		Kirriemuir			
		Lanark			
3500	1	Lanark Conrs.(L)	1 0 0	7 10 0	1 2 6
		Largo, near Leven			
280	8	Largs	8 0 0	7 10 0	8 10 0
1309	1	Lasswade	1 0 0		
177	5	Lauder	5 0 0	5 0 0	5 0 0
2000	1	Leslie, Fife	1 0 0	7 10 0	1 5 0
618	1	Lesmahago	1 0 0	6 0 0	1 0 0
		Leuchars			
900	5	Leven	5 0 0	10 0 0	7 0 0
100	10	Linlithgow	10 0 0	10 0 0	19 0 0
		Linton			
		Lochee, n. Dundee			
434	5	Lochgilphead(Ld.)	5 0 0	7 0 0	5 10 0
380	5	Lochwinnoch	5 0 0	3 10 0	4 0 0
		Macduff			
1200	1	Markinch, Paisley	1 0 0	8 0 0	1 5 0
		Maryhill, n.Glasg.			
282	3	Mauchline	3 0 0	5 0 0	3 0 0
667	5	Maxwll T.& Dumf.	5 0 0	5 0 0	3 to 3¼
423	5	Maybole, Ayrshire	5 0 0	4 10 0	5 0 0
		Meigle (L.) £700			
373	2	Melrose	2 0 0	7 10 0	2 10 0
718	2	Mid & East Calder	2 0 0		2 0 0
200	5	Moffat	5 0 0	5 0 0	
120	2½	Do., new shares	2 10 0	5 0 0	
400	20	Montrose	20 0 0	10 0 0	35 0 0
		Muirkirk (L.) £1000			
1000	5	Musselburgh	5 0 0	8 0 0	9 9 0
618	1	Nairn	1 0 0	5 0 0	1 0 0
		Neilston, n. Glasg.			
300	5	Newburgh, Fife	5 0 0	8 0 0	7 0 0
300	1	Do., new shares	1 0 0	8 0 0	
1200	1	Newmilns	1 0 0	7 10 0	1 2 0
		Newport, n. Dundee			
1300	1	Newport, Fife	1 0 0	5 0 0	1 0 0
		Newton-on-Ayre			
107	14½	Newton Stewart	14 10 0	5 0 0	14 10 0
300	5	N. Berwick, N.B.	5 0 0	5 0 0	7 10 0
		N. Queensferry			
245	5	Oban	5 0 0	7 10 0	5 7 6
1000	5	Peebles	5 0 0	6 0 0	5 0 0
500	2½	Do., new shares	2 10 0	6 0 0	2 10 0
1000	25	Perth	25 0 0	5 0 0	25 0 0
3000	5	Perth, New	5 0 0		0 3 0
		Peterhead			
2000	1	Pettenween	1 0 0	6 0 0	1 1 0
2416	1	Pollokshaws	1 0 0	7 10 0	1 5 0
		Port Glasgow			
		Portobello			
		Portsoy			
200	5	Prestonpans	5 0 0	6 0 0	
1594	1	Renton, Dumbrtn.	1 0 0	7 10 0	1 1 6
		Rothes			
1500	1¼	Rutherglen	1 6 8	5 0 0	1 6 8
250	12	St. Andrew's	12 0 0	8 6 8	16 10 0
193	12	Do., new shares	12 0 0	8 6 8	16 10 0
400	5	Saltcoats	5 0 0	7 10 0	6 0 0
936	1	Sanquhar	1 0 0	5 0 0	0 15 0
30	1	Do., preference	1 0 0	5 0 0	
400		Selkirk	5 0 0	10 0 0	10 0 0
508	1	South Queensferry	1 0 0	5 0 0	1 0 0
200	5	Stewarton	5 0 0	10 0 0	6 to 6½
7450	2	Stirling	2 0 0	8 0 0	3 5 0
2500	1	Stonehaven	1 0 0	6 5 0	1 5 0
1110	1	Stonehouse	1 0 0	7 10 0	13s. to 15s.
600	2½	Stornoway	2 10 0	8 0 0	3 10 0
		Stow (Limited)			
500	5	Stranraer	5 0 0	10 0 0	6 13 6
588	2	Strathaven	2 0 0	8 0 0	3 0 0
643	2½	Thurso	2 10 0		2 10 0
		Tillicoultry			
		Turriff			
800	1	Tranent	1 0 0	5 0 0	1 0 0
		Troon			
		Tullibody			
2051	1	Wemyss & Bkhn	1 0 0	6 0 0	1 0 0
		Wick			
665	5	Wigtown	5 0 0		
		IRELAND.			
1800	1	Antrim (Limited)	1 0 0		1 0 0
		Ardee			
300	10	Armagh (Lim.)	10 0 0	10 0 0	20 2 6
500	5	Athy (Limited)	4 0 0	6 0 0	5 0 0
		Balbriggan £1400			
		Ballycastle			
900	6	Ballymena & Harryville (L.)	6 0 0	8 0 0	6 10 0
184	10	Ballymoney	10 0 0	5 0 0	10 0 0
220	5	Ballynahinch(Ld.)	5 0 0	5 0 0	5 0 0
		Ballyshannon £2000			
		Bangor, Down			
5250	20	*Belfast*	20 0 0	10 0 0	39 0 0
2450	20	Do., new shares	20 0 0	10 0 0	35 to 37
		Boyle (Limited)			
1047	5	Carlow	5 0 0	5 0 0	5 0 0
600	5	Carrickfergus(Ld.	5 0 0	8 0 0	6 5 0
197	10	Carrickmacross(L.)	10 0 0	5 0 0	10 0 0
300	10	Carrick-on-Suir	10 0 0	6 0 0	10 0 0
228	10	Castleblaney (Ld.)	10 0 0	5 0 0	10 0 0
		Castlederg			
400	5	Cavan (Limited)	5 0 0		5 0 0
		Clones (L.) £2000			
2000	5	Clonmel Consmrs.	5 0 0	6 0 0	5 0 0
240	5	Comber (Limited)	5 0 0	5 0 0	5 0 0
500	5	Cookstown	5 0 0	5 0 0	
		Coote Hill			
12000	5	Cork Conrs.(Lim.)	5 0 0	8 0 0	7 15 0
6000	5	Do., new shares	4 0 0	8 0 0	6 10 0
		Donaghadee £2000			
608	11	Drogheda	11 0 0	7 0 0	14 10 0
420	5½	Do., new shares	5 10 0	7 0 0	7 5 0
19000	10	*Dublin Alliance*	8 0 0	8 15 0	11 10 0
440	25	Dundalk (Limited)	25 0 0	8 0 0	25 0 0
600	5	Dungannon	5 0 0	5 0 0	6 0 0
871	5	*Downpatrick*	5 0 0	4 0 0	4 0 0
249	10	Ennis (Limited)	10 0 0		11 0 0
240	25	Galway	25 0 0	10 0 0	35 0 0
		Gorey (L.) £2000			
		Holywood (Lim.)			
		Keady			
600	5	Kells (L.) Meath	5 0 0	6 0 0	5 0 0
600	10	Kilkenny (Limited)	10 0 0	8 0 0	12 0 0
		Killarney (L.) £3000			
		Kilrush			
		Kinsale (L.) £2000			
210	10	Larne (Limited)	10 0 0	5 0 0	10 0 0
150	10	Letterkenny (Ld.)	10 0 0	6 0 0	11 0 0
		Limerick (see United Gen.)			
500	10	Lisburn (Limited)	10 0 0	10 0 0	15 0 0
300	5	Lismore	5 0 0	3 0 0	
100	5	Do., preference	3 0 0	5 0 0	
600	15	Londonderry	15 0 0	6 13 4	21 0 0
		Longford			
540	10	Lurgan	8 0 0	6 0 0	9 0 0
		Mallow			
2191	1	Maryborough(Ld.)	0 5 0		0 5 0
		Midleton			
770	5	Monaghan (Lim.)	5 0 0	4 10 0	5 16 0
2000	10	Navan	5 0 0	6 0 0	4 0 0
		Nenagh			
1400	5	Newry Conrs. (L.)	5 0 0	10 0 0	8 3 0
450	5	Newtownards	5 0 0	7 0 0	6 5 0
200	10	Newtownlimavady	10 0 0	5 0 0	10 0 0
		Omagh	5 0 0	7 10 0	6 0 0
250	20	Portadown	20 0 0	5 0 0	20 0 6
125	20	Portaferry			
500	10	Queenstown	10 0 0	6 0 0	10 0 0
200	10	Do., new shares	5 0 0	6 0 0	5 0 6
		Roscommon £2500			
		Saintfield(L.) £1000			
600	10	Sligo	10 0 0	8 0 0	12 10 0
600	5	Do., new shares	5 0 0	8 0 0	6 5 0
		Tandragee (Lim.)			
		Tuam (L.) £3000			
540	5	Tullamore	5 0 0	6 0 0	5 0 0
240	5	Tullow	5 0 0	6 0 0	5 0 0
		Warrenpoint £3000			
1600	10	*Waterford*	10 0 0	6 0 0	12 0 0
300	10	Wicklow (Lim.)	10 0 0	6 0 0	10 0 0

The Gas-Works in the undermentioned towns belong to private individuals. Those marked * by the purchase of the shares in extinct companies:—

Alford.	Chapel-en-le-Frith.	Enniscorthy.	Holt.	Nantwich*.	Ripon.	Stokesley.
Ballina.	Chard.	Farsley.	Hunmanby.	Nettlebed.	Ross.	Stowmarket.
Barking*.	Clare, Suffolk.	Fermoy.	King's Langley.	Newport (I. of W.)	Rhyl.	Thirsk.
Beaufort (Brecon).	Crewe.	Ferry Hill.	Leiston (Suffolk).	New Ross.	St. Blazey (Cornwall).	Tipperary.
Beaumaris.	Crickhowell.	Goole.	Lynn.	Oakham*.	St. Ives* (Hunts).	Tiverton*.
Berkeley.	Dingwall.	Hadleigh.	Market Deeping.	Parsonstown.	St. Neots*.	Waltham Abbey.
Billericay.	Eccleshill, near Leeds.	Halstead.	Milnrow, nr. Manchester.	Penryn.	Seaham.	Wem.
Bodmin.	Ellesmere.	Harleston.	Mold Green, nr. Huddersfield.	Peterborough.	Sidmouth.	Wexford.
Broadbottom.		Harrow-on-the-Hayle. [Hill.		Pontypool.	Sittingbourne.	Whitby*.
Bungay.				Redditch.	Southall, Midlsex.	Whitchurch (Salop).
Burntisland.						

The Gas-Works belong to Local Boards or to Municipal Corporations, or to Commissioners acting under special Acts of Parliament, in the following towns:—

Abergavenny.	Bollington (Ches.).	Darlington.	Knaresborough.	Milton (Kent).	Rothesay.	Tenby.
Athlone.	Brighouse.	Devizes.	Leek.	Nelson, n. Burnley.	Salford.	Tralee.
Ballinasloe.	Burnley.	Doncaster.	Limerick Corporation Works.	Newton (Lanc.)	Southport.	Trim (Meath).
Bethesda, Bangor.	Burton-on-Trent.	Enniskillen.	Oldham.	Sowerby Bridge.	Tyldesley & Shakerley.	
Beverley.	Bury (Lanc.).	Great Malvern.	Lytham (Lanc.).	Paisley.	Spalding.	Wallasey.
Birkenhead.	Carlisle.	Greenock.	Macclesfield.	Renfrew.	Stockport.	Walsall.
Blackpool, & Layton with Warbrick.	Cashel.	Halifax.	Manchester.	Richmond(Yorks.)	Stockton-on-Tees.	Wells (Norfolk)
	Coleraine.	Haverfordwest.	Middlesborough.	Ripon.	Strabane.	Workington.
	Dalton.	Keighley.	Middleton.	Rochdale.	Teignmouth.	Youghall.

Share List of Water Companies.

See "Share List of Gas Companies" for Gas and Water Companies.

No. of Shares issued.	Amount per Share.	Name of Company.	Amount paid up per Share.	Div. per Cent. per Annum.	Price per Share.
		Airdrie & Coatbrdg	£ s d	£ s d	£ s d
588	1	Alexandria, Dumb	1 0 0		0 2 6
800	25	Ayr	25 0 0	5 0 0	25 0 0
1460	10	Banbury	10 0 0	3 10 0	9 0 0
		Belper			
9600	25	Birmingham	25 0 0	6 10 0	34 0 0
9600	17½	Do., new shares	3 0 0	6 10 0	
6000	10	Blackburn	10 0 0		
		Boston			
		Br. of Earn(L)£450			
		Brighton, Hove, &			
8000	25	Bristol . [Preston	25 0 0	3 2 0	20 to 21
8000	12½	Do., preference	12 10 0	5 0 0	13 2 6
		Broadstairs		4 0 0	
		Brompton and Gillingham			
5000	10	Bury and Radcliffe	10 0 0	2 0 0	10 0 0
1333	15	Do., pref. shares	15 0 0	10 0 0	31 15 0
1333	18	Do., do.	6 0 0	10 0 0	14 0 0
2000	10	Do., do.	5 0 0	4 0 0	5 0 0
2000	10	Do., do.	1 0 0	4 0 0	5 0 0
3250	10	Cambridge	10 0 0	7 0 0	16 0 0
3250	3	Do.	3 0 0	7 0 0	4 16 0
	Sk.	Cardiff	100 0 0	5 15 0	115 0 0
1500	10	Do.	8 0 0	5 15 0	9 0 0
55625	Sk.	Cheltenham	100 0 0	5 5 0	120 0 0
687¼	25	Do., pref. shares	25 0 0	4 10 0	25 0 0
		Chepstow			
		Chester			
2485	2	Clay Cross	2 0 0	8 0 0	2 16 0
		Colchester			
175	20	Colne, Lancashire	20 0 0	5 0 0	28 0 0
	5	Consett District	4 0 0		4½ to 4¾
		Dartford			
1250	20	Darwen	20 0 0	2 10 0	19 to 19½
1400	5	Deal	5 0 0	7 0 0	6 0 0
1560	25	Derby	25 0 0	10 0 0	50 0 0
400	50	Dudley	50 0 0	1 0 0	20 0 0
250	25	Do., pref. shares	25 0 0	4 10 0	
		Dukinfield			
11600	10	Dundee	10 0 0	5 0 0	11 0 0
2670	5	Dunfermline	5 0 0	2 0 0	2 10 0
	5	Durham	5 0 0		7¼ to 7½
		East Barnet G. & W.			
7360	25	Edinburgh	25 0 0	5 0 0	28 0 0
7360	12½	Do., new shares	12 10 0	5 10 0	16 0 0
7218	6¼	Do., do. ¼ shares	6 5 0	5 0 0	7 0 0
5581	6¼	Do., do. do.	2 10 0	5 0 0	2 15 0
2000	25	Exeter	25 0 0	6 10 0	42 0 0
		Falmouth			
		Folkestone			
		Gosport			
	20	Gravesend&Milton	20 0 0	3 0 0	14 to 16
		Great Grimsby (L)			
1000	5	Greenock (Shaw's Gravitation)	50 0 0	7 0 0	68 to 70
		Guiseley, n. Leeds			
		Harrogate			
		Heywood			
1500	10	Kilmarnock	10 0 0	2 0 0	8 0 0
3200	25	Leicester	25 0 0	4 10 0	27 10 0
120	25	Lewes	25 0 0	6 0 0	26 0 0
		Limerick			
1080	25	Lincoln	25 0 0	7 10 0	38 10 0
		London Comps.—			
47000	10	Berlin	10 0 0	4 10 0	8 to 9
12000	25	Chelsea	25 0 0	5 5 0	28 to 29
975000	Sk.	East London	Stock.	6 0 0	126 to 128
10000	50	Grand Junction	50 0 0	8 0 0	78½ to 79
5840	25	Do., ¼ shares	25 0 0	8 0 0	39½ to 39½
2160	25	Do., new ¼ sh.	10 0 0	7 10 0	
2310	100	Kent	100 0 0	6 0 0	129 to 131
1460	100	Lambeth	100 0 0	6 0 0	110 to 115
4120	50	Do., new shares	50 0 0	6 0 0	51¼ to 53
		New River		441 6 8 per sh.	£17,400
1560	100	New River London			
		Bge. Annuities	100 0 0	2 10 0	55 0 0
3036	100	Southwark & Vxll.	100 0 0	6 0 0	126 to 128
3036	25	Do., do.	25 0 0	6 0 0	31½ to 33½
1296	100	Do., do.	100 0 0	5 0 0	104 to 106
1296	100	Do. (1867)	85 0 0	4 10 0	106 to 108
12168	61	West Middlesex	61 0 0	5 15 0 per sh.	110 0 0
		Do., new shares	6 2 0	4 0 0	9 to 9¼
		Liskeard			
		Maidstone			
		Maldon (Lim.)			
		Margate			
		Matlock			
550	10	Neath	9 0 0	4 10 0	10 10 0
25000*l*	Sk.	Newcastle-on-Tyne (Whittle Dean)	Stock.	5 0 0	84½ to 85½
9600	6¼	Do., pref. do.	5 0 0	5 0 0	5¼ to 5¼
135	20	Newport, Carisbke.	20 0 0	4 10 0	26 0 0
		Newport, Mon.			
		Newry (L.) £6000			
2000	10	North Cheshire	10 0 0	7 10 0	13 0 0
1581	10	Do.	2 0 0	7 10 0	2 12 0
	10	North Shields	10 0 0		12 to 12½
		Norwich			
3600	50	Nottingham	50 0 0	5 0 0	60 10 0
		Pontypridd (Lim.)			
		Poole District (L.)			
8000	10	Portsmouth	10 0 0	6 0 0	
8000	5	Do.	2 10 0	6 0 0	
301	10	Queenstown (L.)	10 0 0	4 0 0	10 0 0
99	10	Do.	2 0 0	4 0 0	2 0 0
100	10	Do., new shares			
400	5	Ramsey, I. of Man	5 0 0		
1500	10	Ramsgate	10 0 0	6 0 0	13 to 13½
		Reading			
		Rochdale			
		Rothesay (L.) £7000			
		Royston (L.) £2500			
		Saffron Walden (L.)			
		St. Helen's			
		Scarborough			
		Sheffield			
		Shrewsbury			
		Southport			
11184	10	South Staffordsh.	10 0 0		11 17 0
2554	10	Do.	5 0 0		
		Spalding			
21000	5	Staffordshire Potts [boro'	5 0 0	6 0 0	7 5 0
1800	12½	Stcktn. & Middles-	12 10 0	6 0 0	
800	12½	Do., A shares	12 10 0	6 0 0	
1591	12½	Do., B shares	7 0 0	6 0 0	
4000	10	Do., C preference	2 0 0	5 0 0	2¾ to 3
31000	5	Sndrland&S. Shlds.	5 0 0	9 10 0	9 5 0
		Tolcross, Lanark			
		Tweedmth (L.) £500			
		Wakefield			
3000	10	Warrington	10 0 0	7 10 0	15 5 0
		Wellington, Salop			
		Weston-sup-Mare			
		Weymouth			
		Winchester G. & W.			
		Wirral, Cheshire			
20000	5	Wolverhmptn New Yeadon (Limited)	5 0 0	4 0 0	5 0 0
6000	10	York New Co.	10 0 0	5 0 0	11 12 6

The Water-Works in the undermentioned towns belong to private individuals:—

Campbelltown. Chidwall (Lancaster). Hyde (Cheshire). Knaresborough. Stamford.

The Water-Works belong to Local Boards of Health, Municipal Corporations, or Commissioners acting under Special Acts of Parliament, in the following towns:—

Aberdeen.
Abergavenny.
Aberystwith.
Alnwick.
Ashby-de-la-Zouch.
Ashton-under-Lyne.
Baildon, Yorkshire.
Barnsley.
Bath.
Belfast.
Bilston.
Birkenhead.
Bishop's Auckland.
Bolton.
Bradford, Yorkshire.
Brynmaur, Brecon.
Burnley.
Bury St. Edmund's.
Carlisle.
Carmarthen.
Chelmsford.
Chorley.
Cork.
Coventry.
Croydon.
Darlington.
Dartmouth.
Dorchester.
Dover.
Dublin.
Dumfries.
East Stonehouse.
Ely.
Epsom, Surrey.
Fareham, Hants.
Glasgow.
Gloucester.
Greenock.
Halifax.
Hastings and St. Leonard's.
Haverfordwest.
Haworth, Yorkshire.
Huddersfield.
Hull.
Ilfracombe, Devon.
Keighley.
King's Lynn.
Kirkcaldy.
Knighton, Radnor.
Lancaster.
Leamington.
Leeds.
Leek.
Leith.
Liverpool.
Llandilo.
Llanelly.
Lytham.
Macclesfield.
Maidstone.
Manchester.
Merthyr Tydvi..
Montrose.
Nantwich, Cheshire.
Oldham.
Oxford.
Paisley.
Pembroke.
Penrith.
Penzance.
Perth.
Peterhead.
Pontefract.
Poole.
Port Glasgow.
Preston.
Pultneytown, Caithness.
Rotherham.
Rugby.
Salford.
Salisbury.
Sheerness.
Shipley.
Southampton.
Stirling.
Stockport.
Stroud.
Swansea.
Teignmouth.
Torquay.
Tunbridge Wells.
Warwick.
Welchpool.
West Cowes.
Whitby.
Whitehaven.
Wigan.
Windhill, Yorkshire.
Wirksworth.
Worcester.

Price Current.

CASTINGS.—*Per Ton.*

Average Weight of Cast-iron Gas-pipes, per Yard.

1¼ in.	2 in.	2½ in.	3 in	4 in.	5 in.	6 in.	7 in.	8 in.	9 in.	10 in.	12 in.
16	21	28	33	51	70	89	107	126	149	177	208 lb

Retail Prices are 5 to 10 per cent. higher.	London.	Glasgow.	Newcastle	Wales.	Yorkshire, Derbyshire, and Staffordshire.
	£. s. d.	£. s. d.	£. s. d.	£. s. d.	£. s. d.
Pig Iron, No. 1, G.M.B.	3 15 0	2 14 6	2 12 6	3 10 0	3 15 0
1¼ and 2-inch Socket-pipes	7 10 0	6 0 0	6 15 0	6 15 0	7 10 0
2½ and 3-inch ditto	7 0 0	6 0 0	6 5 0	6 10 0	7 0 0
4 and 5-inch ditto	6 10 0	5 10 0	5 15 0	6 0 0	6 10 0
6 inches and upwards ditto	6 5 0	5 0 0	5 10 0	5 15 0	6 5 0
Retorts, 1st fusion, hot blast	6 0 0	—	5 5 0	5 10 0	6 0 0
Ditto, 2nd ditto, cold ditto	7 0 0	5 15 0	5 15 0	6 0 0	7 0 0
Tank-plates, ¼ thick and above	6 10 0	5 10 0	5 10 0	5 15 0	6 5 0

WROUGHT-IRON TUBING,

Subject to 50 per cent. Discount.

	2 in.	1½ in.	1¼ in.	1 in.	¾ in.	½ in.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Patent Welded Tubes, from 2 to 12 feet—per foot	1 8	1 0	0 10	0 7	0 5	0 4½
Ditto ditto, from 6 inches to 18 inches—each	3 0	2 0	1 9	1 3	1 0	0 9
Connecting-pieces, or Long Screws	3 6	2 3	2 0	1 6	1 2	0 11
Bends, Springs, and Elbows (wrought iron)	3 9	2 3	1 9	1 0	0 10	0 8
Tees, wrought or cast	4 0	2 6	2 0	1 6	1 1	0 10
Crosses, ditto	4 6	3 0	2 6	2 0	1 6	1 2
Iron Cocks	17 6	9 6	7 6	4 6	3 3	2 6
Ditto, with brass plug	28 0	16 0	13 0	7 0	5 6	4 6
Diminishing Sockets, Caps, Plugs, and Nipples	1 3	0 9	0 8	0 6	0 5	0 4
Plain Sockets	1 0	0 8	0 7	0 5	0 4	0 3
Syphons, 2-quart	15 0	14 0	13 6	13 0	12 0	—

GAS COALS.—*Per Ton.*

Newcastle.—Unscreened:—

East Castle, Haswells, Nettlesworth Primrose, and South Pelaw ..... 7s. 0d.

Felling, North Pelton, Redheugh Main, Walker's Primrose, West Wear, and Whitwell Primrose ... 7 3

Burnhope, Craghead, Charlaw, Derwent, Edmondsley, Eighton Moor, Hartlepool Pelaw, Holmside, Lambton's Gas, Lanchester Pelaw, Medomsley, Mickley, New Pelaw, Pelaw Main, Ravensworth, South Moor Pelton, South Leverson, Townley Main, Tyne Main, West Pelaw, Wearmouth Hutton, and Witton 7 6

Pearth, Ravensworth Pelaw, Waldridge, West Garesfield, and West Pelton 7 9

Brancepeth, Dean's Primrose, New Pelton, Pelton, South Pearth, Stella, Urpeth, Washington Hutton, and West Leverson 8 0

Ramsay's Newcastle Cannel 20 0

Wigan Cannel (at Liverpool) 17 0

Scotch Cannel:—

Boghead (at Leith) 70 0
Kirkness, best (at Burntisland) 28 6
Capeldrae, 1st quality (at ditto) 28 6
Cowdenbeath 28 6
Ditto, 2nd ditto (at ditto) 18 6
Lesmahago (at Glasgow) 29 0
Ditto (at Granton) 30 0
Arniston 27 6
Wemyss 20 0
Haywood, Wilsontown (at Granton) 22 0
Pirnie 14 0
Lothian's Cannel (at Leith) 28 0
Myles' Cannel 23 6

FREIGHTS.

Coastwise—Newcastle.—Per Ton:—

Chatham and Rochester	6s. 0d
Cork	9s. to 10 0
Dover, Folkestne, & Ramsgte	6 9
Dublin	10s. to 10 6
Exeter Quay	11 0
Ipswich	6 9
London (from Leith)	8 6
London (Pool)	6 6
Lowestoft and Yarmouth	5 0
Portsmouth & Southampton	8s. to 8 6
Plymouth	10 6
Shorcham	7 6
Whitstable	6 0
Weymouth	9 0

Foreign.—Per Keel:—

Barcelona	£22 to 22 10
Bordeaux	£13 to 14 0
Boulogne and Calais	15 0
Cadiz	—
Cronstadt	6 10
Copenhagen	19 0
Genoa	—
Hamburg	10 0
Havre de Grace	19 0
Leghorn	13 10
Lisbon	10 0
Rotterdam	7 10
Stettin	£18 to 18 10
Trieste	£23 10s. to 24 0
Venice	

SUNDRIES.

Best Nstle. Fire-bks., p. 1000, £2 10s. to £2	15 0
Cliff's Fire-bks. (at Wortley), p. 1000	2 15 0
Ingham's ditto (at Wortley), p. 1000	2 15 0
Fire-clay Retorts, p. ft. run, 5s. 6d. to	0 7 0
Tough Cake Copper, p. ton	84 0 0
English Pig Lead, p. ton	20 0 0
Welsh Bar Iron (in London), p. ton	7 0 0
Foreign Spelter, p. ton	22 2 6
English Block Tin, p. ton	85 0 0
Banca, p. ton	95 0 0
Tarred Rope Yarn, p. cwt.	1 0 0

WANTED, a Working Manager for the Baslow Gaslight and Coke Company, Limited. Must thoroughly understand the management of the works (three retorts at work), and be able to lay mains, put in internal fittings, service-pipes, take indices, and repair meters.

Apply, with testimonials, by letter, stating salary, to the CHAIRMAN.

TO CONTRACTORS.

THE Gas Company, Worcester, intend constructing a GASHOLDER TANK on their premises, 140 ft. diameter by 31 ft. in depth, and solicit TENDERS for the work.

Further information may be obtained, the specifications (21s. per copy) can be had, and the drawings seen, at the Company's works, Worcester, and with William Esson, Engineer, Ness House, Cheltenham.

Tenders for the work will have to be delivered free to JOSIAH STALLARD, Esq., Chairman of the Company, on or before noon, the 25th of January proximo.

Worcester, Dec. 11, 1866.

TO TAR DISTILLERS, NAPTHA WORKERS, PATENT FUEL AND CHEMICAL MANUFACTURERS.

THE Directors of the Swansea Gas-light Company are desirous of receiving OFFERS for the whole of the TAR, or such part thereof as they may be willing to dispose of, as is produced at their works at Swansea for a term of One Year from the 1st of January, 1867. The present quantity at their disposal would amount to 120,000 gallons per annum, or thereabouts. The works are situated within a distance of 90 feet from the broad and narrow gauge railways, and 370 feet from South Docks, Swansea. The tenders to be at per gallon, and to be sent in to the undersigned on or before the 14th of January, 1867.

The Directors do not bind themselves to accept any tender. By order,

THORNTON ANDREWS,
Swansea, Dec. 10, 1866. Manager.

WANTED, a Man who has a thorough knowledge as to the manufacture of gas, to take the practical MANAGEMENT and charge of Gas-Works, capable of producing about 100,000 cubic feet of gas daily.

Application, stating salary required, &c., to be addressed to Q., Mr. KING, 11, Bolt Court, FLEET STREET, E.C.

ACCOUNTANT and Cashier Wanted, in the gas-fitting business. Security required (Guarantee Society preferred). Hours of business, 9 a.m. till 8 p.m. First-rate reference indispensable.

Apply, by letter only, stating full particulars as to the situation lately held, salary required, reference, and every information to save trouble, to Z. A., care of Mr. King, 11, Bolt Court, FLEET STREET, E.C.

A GENTLEMAN, who has had con-siderable experience in the designing, erecting, and managing of Gas-Works, at home and abroad, desires to obtain another engagement as MANAGER or ACCOUNTANT, to a Gas Company or Corporation. Has first-class testimonials, and can give security, if required.

Address, D. W., care of Mr. King, 11, Bolt Court, FLEET STREET, E.C.

TO GAS COMPANIES AND CONTRACTORS.

FOR SALE, 4 Purifiers, 9 ft. square by 2 ft. deep, with hydraulic centre-valve, by-pass valves, and 6-in. connexions, vertical condensers, with by-pass, scrubber, and washer; also a GOVERNOR. The whole of the above are being removed to make room for larger apparatus, rendered necessary by the rapidly increasing business of the Company.

For further particulars, apply to Mr. A. C. FRASER, Manager, Gas-Works, COLCHESTER.

Gas Company's Office, Colchester,
Dec. 8, 1866.

TO GAS COMPANIES.

WANTED, by the Advertiser, a Situation as WORKING MANAGER or FOREMAN, having filled a similar situation. Good character can be given.

Address, H. G., 2, Union Terrace, Wandsworth Road, CLAPHAM, S.

TO BUILDERS AND CONTRACTORS.

THE Directors of the Canterbury Gas and Water Company are prepared to receive TENDERS for excavating and building a BRICK TANK, 76 ft. in diameter, and 21 ft. in depth.

Specifications may be seen, and further information obtained, on application at the Company's Office in Castle Street, Canterbury, between the hours of Ten and Four.

By order of the Board,
W. A. ABRAM, Secretary.

TO GAS MANAGERS, ETC.

FOR SALE, a "Jones's Patent Ex-HAUSTER," 2 ft. 2 in., over flanges, in breadth, by 2 ft. 11 in. in depth, with 7-in. inlet and outlet pipes, and self-acting hydraulic by-pass. Dip of seal 12 in.; fitted complete. Has only been a short time in use.

For further particulars apply to JOHN E. POYNTER, 72, Great Clyde Street, GLASGOW.

BALANCE-SHEETS AND REVENUE ACCOUNTS

A FIRM of Accountants, much engaged in the preparation of Gas Companies Accounts, are open to contract for the keeping, balancing, or auditing the books of other Companies, which, from their experience, they are enabled to do on moderate terms.

Address, SANDELL & MADDERS, Accountants, 4, Skinner's Place, Size Lane, LONDON, E.C.

GEORGE GLOVER & CO.'S
PATENT DRY GAS-METERS.

The advantages of these Meters are best appreciated by a consideration of the evils they avert. The more prominent of these evils are the following:—

1. Inaccurate measurement, and varying registration.
2. Jumping of the lights, and their sudden extinction.
3. Escapes of gas through the plugs being left out, or imperfectly secured, when the Wet Meter has been replenished with water.
4. The gas passing without being registered at all.
5. The temptations and facilities to fraud which it is notorious the Wet Meter presents.

CLASSES X. & XXXI.

6. The damage to house property which the impracticable attempt to keep the lights from jumping, by giving all the pipes a gradual ascent from the Meter, so as to admit of the water trickling back into it, necessarily occasions.
7. The waste of gas from the higher pressure required to work Wet Meters, the possibility of the water freezing, and their axles and moving parts becoming corroded.

These faults, characteristic of the Wet Meter, and fruitful in annoyance, interruption to business, pecuniary loss, and danger, are entirely averted by the use of George Glover and Co.'s Patent Dry Gas-Meter.

It is, besides, more durable than the Wet Meter; and they maintain it in good working order for five years, free of cost to the purchaser; and for any number of years, at half the expense at which the Wet Meter can be maintained.

As regards accurate measurement, correct registration, the absence of temptation to fraud, safety, convenience, and economy, the superiority of their Dry Meter is admitted; and it has come more rapidly into use, both in this country and abroad, than any Meter hitherto manufactured.

The prices may be compared favourably with those of any meters in the market; and they are lower than most.

List of Prices, and all Particulars, may be obtained on Application.

RANELAGH WORKS, RANELAGH ROAD, PIMLICO, LONDON, S.W.;
127, BOULEVARD DE MAGENTA, PARIS; AND 15, MARKET STREET, MANCHESTER.

ECONOMY IN GAS PURIFICATION.

Mc DOUGALL'S
HYDRATED PEROXIDE OF IRON.

This Oxide is now well known, and has commended itself for efficiency and durability. It is free from any mixture of sawdust or similar material, and every particle is available for use. It readily takes up sulphur, revivifies rapidly, and lasts longer than any other Oxide in the market. Prices on application to—

ALEX. Mc DOUGALL, Manufacturing Chemist,
LONDON—11, Arthur Street West, London Bridge, E.C.; MANCHESTER—Riga Street, Shudehill.

E. J. & J. PEARSON,
DELPH & TINTAM ABBEY FIRE-CLAY & BRICK-WORKS,
STOURBRIDGE,
PROPRIETORS OF
BEST GLASS-HOUSE POT & CRUCIBLE CLAY;
MANUFACTURERS OF
GLASS-HOUSE POTS, CRUCIBLES, GAS-RETORTS, & FIRE-BRICKS OF EVERY DESCRIPTION.

TO BE SOLD, a Wrought-Iron Annular Condenser, a WROUGHT-IRON SCRUBBER, with three shelves, both 10 feet high; TWO PURIFIERS, 8 ft. by 4, by 3 ft. deep; STATION-METER, to pass 2000 per hour, complete, with 5-inch valves, by-passes, and connexions.

Also a SIX-INCH GOVERNOR, with by-pass, and a CAST IRON CIRCULAR TAR TANK, 7 ft. by 4 ft. 6 in.

The whole erected last year, and have been in use about nine months. Also several hundred yards of 6, 5, and 4-inch MAIN PIPES.

Apply at the Aldershot Gas and Water Company's Office, Bank Street, ALDERSHOT.

GLASGOW CORPORATION WATER-WORKS.

TO IRONFOUNDERS.

THE Glasgow Corporation Water-Works Commissioners are prepared to receive TENDERS for supplying the following CAST-IRON PIPES—viz.:

About 1500 tons of 48 in. diameter.
" 3000 " 36 in. "
" 350 " special castings.

Required for laying an additional line of syphon-pipes across the valleys of the Duchray, Endrick, and Blane, on the line of aqueduct from Loch Katrine to Glasgow.

The drawings and specification may be seen in the hands of the Engineer, Mr. Gale, at this Office.

Sealed tenders, addressed to the Subscriber, Mr. Burnet, and endorsed "Tender for Pipes," will be received by him, at his Office here, up to Saturday, the 29th of December current.

The Commissioners do not undertake to accept the lowest or any tender.

By order,
JOHN BURNET, Secretary.

Water-Works Office, 23, Miller Street,
Glasgow, Dec. 4, 1866.

FIRE-CLAY GAS-RETORTS, &c., CANNEL AND STEAM COALS.

WILLIAM FRASER, Inverkeithing (owner of the Works at which Fire-clay Retorts were first made), having greatly enlarged his works, can supply retorts and other fire-clay goods to any extent.

References can be given to managers of above a hundred Gas-Works whom he supplies.

WILLIAM FRASER ships COWDENBEATH PARROT COALS at Charlestown and Burntisland at 11s. per ton; and HALBEATH STEAM COALS, on Navy List, at 8s. 6d. per ton.

STOURBRIDGE FIRE-CLAY WORKS.

E. BAKER & CO.,
24 WHARF, HARROW ROAD, PADDINGTON, W.

FIRE-BRICKS, LUMPS, SQUARES, and TILES of all dimensions.
GAS-RETORTS always in stock.
GARDEN EDGINGS of various patterns.
ORNAMENTAL BUILDING BRICKS.
GRATE BACKS in various designs.
Contracts entered into to set Retorts, erect Furnaces, &c.
Shipments on the shortest notice.

JAMES OAKES and CO.,
ALFRETON IRON WORKS, DERBYSHIRE,
AND
WENLOCK IRON WHARF, 20, WHARF ROAD, CITY ROAD, LONDON,

Beg to inform Gas and Water Companies and the public, that they keep in stock in London all the CASTINGS in general use in Gas and Water-Works, including Iron Retorts, Socket and Flange Pipes, Bends, Branches, and Syphons of all sizes, Lamp Columns, &c., &c.

N.B.—Orders for Cast-iron Tanks, Girders, Columns, Cylinders, and all irregular castings, will have immediate attention.

CHARLES HORSLEY, Agent.

D. GRANT & CO.,
GAS-METER MANUFACTURERS
(Stamped according to the Sale of Gas Act).
STATION-METERS ANY SIZE.
PHOTOMETERS, EXPERIMENTAL METERS,
PRESSURE-GAUGES, &c.
Price List on application.
GAS-METER WORKS, CROSSCAUSWAY, EDINBURGH.

TO INVENTORS AND PATENTEES.

MR. W. H. BENNETT, having had considerable experience in matters connected with Gas, Water, and Sanitary Improvement, begs to say that he continues to assist Inventors in the perfection of their designs, and to obtain for them PROVISIONAL PROTECTION, whereby their invention may be secured for Six Months; or LETTERS PATENT, which are granted for Fourteen Years.

Patents completed, or proceeded with at any stage, thereby rendering it unnecessary for persons resident in the country to visit London.

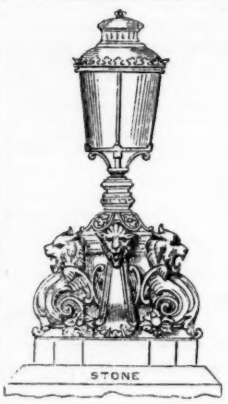
Patents procured for Foreign Countries.

Information as to cost, &c., supplied gratuitously upon application to the advertiser, 42, Parliament Street, WESTMINSTER. [Office of the JOURNAL OF GAS LIGHTING, &c.]

WALTER FORD,
159, GRAY'S INN ROAD, LONDON.
MANUFACTURER OF WET AND DRY GAS-METERS, STATION-METERS, GOVERNORS, &c. &c.

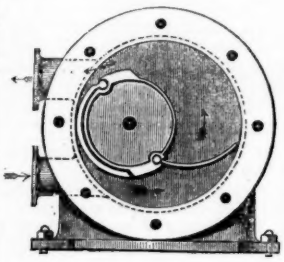
Sole Manufacturer of **PADDON'S PATENT STREET-LAMP REGULATORS**, for insuring any required consumption. These Regulators are in general and increasing use, and references can be given to Gas Companies who use them for every Lamp.

WOLVERHAMPTON RETORT WORKS.
ESTABLISHED **1840.**
JOHN EUNSON AND SON,
GAS ENGINEERS, AND MANUFACTURERS OF CLAY RETORTS,
AND FIRE GOODS IN GENERAL,
WOLVERHAMPTON.
Retort Mouthpieces, Bolts, Nuts, and every description of Wrought-Iron Work.



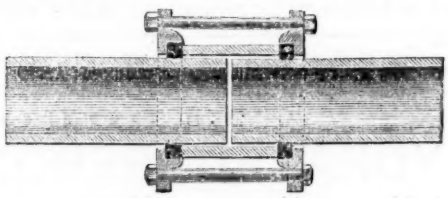
To Gas Companies, Gas Engineers, Gas Fitters, &c.

THE
NEWEST DESIGNS
FOR
LAMP-POSTS, DWARF GAS PILLARS, BRACKETS,
LAMPS, LANTERNS, &c.,
Will, upon receipt of particulars, be forwarded free, on application to
TURNER & ALLEN,
IRONFOUNDERS, ENGINEERS, &c.,
201, UPPER THAMES STREET.



HORSLEY'S
PATENT
GAS EXHAUSTER.
(From 250 Feet to 200,000 Feet per Hour.)
The only Exhauster not requiring a relieving-valve in the by-pass. For particulars and prices apply to the PATENTEE,
22, Wharf Road, City Road, London, N.

DR. NORMANDY'S
PATENT PIPE-JOINTS.



SOLE MANUFACTURERS—
A. NORMANDY and CO., Engineers and Ironfounders,
HOLLY BUSH PLACE, BETHNAL GREEN ROAD, LONDON, N.E.

Also Sole Manufacturers of the Patent Marine Aërated Fresh-Water Apparatus, Steam Pumps Steam Winches, &c.

These Joints have been in use nearly three years on gas-mains, and are still perfectly sound. They have also been proved quite sound under a pressure of 680 feet head of water.

The advantages which these Joints offer are economy, perfect soundness and durability, ease and rapidity of application, use of perfectly plain pipes, so that a tight Joint may be made with cut pipes, even though the ends do not come close together. Any ordinary labourer is capable of securely fixing them.

These Joints are particularly applicable to gas, water, and suction pipes, and remain permanently sound; they are cheaper than the socket-joint, as they save the lead, the gasket, the iron forming the socket (which in a 3-inch main amounts to 10 lbs.), and the fire for melting the lead. There is also considerable saving of time, more than four Joints being made in the time required for making only one of the others, and by unscrewing the bolts, a pipe can be removed and replaced with the greatest facility.

By means of these Joints, which are made of all sizes, pipes made of either wrought or cast iron, copper, lead, tin, earthenware, glass, bitumen, gutta-percha, suction-hose, &c., may be rapidly and soundly united, and taken apart with facility.

GAS & GENERAL ENGINEERING OFFICES,
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MR. JOHN ROMANS, Civil and Practical Engineer, may be consulted at the above address on all matters pertaining to Gas-Works, Water-Works, and other Engineering questions.
Plans and Specifications Furnished, Works Erected and Repaired, or taken on Lease for a term of years.
Mr. Romans is also agent in Edinburgh for supplying High-Classed Scottish Cannel Coal and Fire-Clay Goods.

LAMBERT BROTHERS,
WALSALL,
MANUFACTURERS OF GAS TUBES & FITTINGS,
BRASS GAS JOINTS, BRACKETS, PENDANTS, &c.
TUBE CUTTER.

Number One, 12s.

FRASER'S PATENT RIBBED CAST-IRON RETORTS are being introduced at the Gas-Works, Derby, Shrewsbury, Portsea, Nottingham, Syston, Whitwick, Barrow-in-Furness, Seaham, Risborough, Leighton, Loughborough, Corwen, Castle Donnington, Kegworth, Royston, Woking, Swadlincote, Rugby, Carlow in Ireland, Stornoway, N.B.; also at Gibraltar and Montreal, &c.
Apply to Mr. A. C. FRASER, Gas-Works, COLCHESTER.

OXIDE OF IRON,
We are prepared to supply, on moderate terms,
HYDRATED PEROXIDE OF IRON (BOG OCHRE),
Same quality as supplied by us to several of the most extensive Gas Companies, and which has given entire satisfaction.
FRANCIS RITCHIE & SONS,
BELFAST.

INTERNATIONAL EXHIBITION,
1862. CLASS X.
PRIZE MEDAL
For excellence of Fire-Clay Gas Retorts, and "HONOURABLE MENTION" for good quality of Fire-Bricks.
WILLIAM STEPHENSON & SONS,
THROCKLEY,
NEWCASTLE-ON-TYNE.

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MANUFACTURERS OF
FIRE-BRICKS, LUMPS, TILES. RETORTS, &c. &c.
SCOTSWOOD FIRE-BRICK WORKS,
NEAR
BLAYDON-ON-TYNE.

ADDISON POTTER,
WILLINGTON QUAY,
NEAR NEWCASTLE-UPON-TYNE,
Manufacturer of Clay Retorts, Fire-Bricks, and every description of Fire-Clay Goods.

HARRIS and PEARSON,
PROPRIETORS OF
BEST CLASS-HOUSE POT AND CRUCIBLE CLAY
MANUFACTURERS OF
FIRE BRICKS, GAS RETORTS, &C.
ANDLECOTE FIRE CLAY AND BRICK WORKS,
STOURBRIDGE.
Late in the occupation of I. and W. King. Originally J. Pidcock, Esq.
NB A quantity of best Clay Retorts in stock, viz.—Circulars, 14 inches, 15 inches. 16 inches.
D's, 16×12, 15×14, 20×16, 16×18.

HANCOCK'S INDIA-RUBBER GAS-TUBING.
All sizes, from ¼ in. to 4 in. diameter and upwards.
Also,
HORSE SINGEING APPARATUS, best make, with GAS-BURNERS, COMBS, and INDIA-RUBBER TUBING, all complete.
INDIA-RUBBER BAGS for GAS-MAINS.
WASHERS for GAS and STEAM JOINTS.
VALVES (pure solid Rubber) for STEAM-ENGINES.
PACKING (Elastic) for STEAM-ENGINES.
FLANGE TUBING, for excluding Draughts and Dust through WINDOWS, DOORS, and GLASS CASES.

Section.
Illustrated Price Lists on application.
JAMES LYNE HANCOCK,
Vulcanized India-Rubber Works,
GOSWELL MEWS, AND 266, GOSWELL ROAD
LONDON, E.C.

Trade Mark. **THE MEDAL FOR 1862.**
THE ONLY PRIZE MEDAL AWARDED FOR TUBES AND FITTINGS.
CROWN TUBE-WORKS,
WEDNESBURY, STAFFORDSHIRE.
WAREHOUSE—81, UPPER GROUND ST., LONDON.
JAMES RUSSELL & SONS,
Patentees and First Makers of Wrought-Iron Tubes.

ALFRED PENNY, Gas and CONSULTING ENGINEER,
WENLOCK IRON WORKS,
21, WHARF ROAD, CITY ROAD, LONDON.
Mr. PENNY having had a large experience in the construction, alteration, and management of Gas-Works, begs to inform the Directors of Gas Companies that he may be consulted on all matters appertaining thereto. He also manufactures Gasholders, Purifiers, and all the various apparatus used in Gas-Works, and keeps in stock Retorts and Mouthpieces, Socket-Pipes, Bends, Branches, T-pieces, &c. &c.
Plans, Specifications, and Estimates prepared.

W. J. HOLLANDS,
IRON MERCHANT,
31, BANKSIDE, LONDON, S.E.
SOCKET, FLANGE, HOT-WATER PIPES, AND ALL CONNEXIONS; RETORTS, HYDRAULIC MAIN, LAMP-COLUMNS, &c.; AND EVERY DESCRIPTION OF CASTINGS AND WROUGHT-IRON-WORK FOR GAS AND WATER-WORKS, STEAM, AND GENERAL PURPOSES.
N.B.—All goods kept in stock, and supplied at wholesale prices. Estimates given, and orders by post punctually attended to the same day.

BIRTLEY IRON WORKS,
CHESTER-LE-STREET,
DURHAM.
Manufactory for every description of Casting and Machinery for Gas-Works and Water-Works.
Warehouse in London for Cast-iron Pipes and Connexions of all sizes and in any quantity, Scott's Wharf, Bankside, Southwark.
Office in London, Mr. E. M. PERRI 8,78, Lombard Street.

BELGIAN CLAY RETORTS.
J. SUGG and CO., late ALBERT KELLER, Ghent.—The removal of the import duties on Earthenware permitting the entry of Clay Retorts into England, Messrs. Sugg, of Ghent, beg to draw the attention of the Gas Companies of London, and other Cities, to the very superior quality of the RETORTS manufactured by them. They can be made of any size, in one piece, and of any form. The price will be in proportion to the weight, and very moderate in comparison to their value.
Communications, addressed to J. SUGG and Co., GHENT, will receive immediate attention.

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CANNEL COAL MERCHANT,
HAYMARKET,
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Established 1840.

ROBERT MACLAREN and CO.,
EGLINTON FOUNDRY, GLASGOW,
Manufacturers of all sizes of Cast-Iron Main Pipes, by an improved Patent. General Ironfounders, Gas Engineers, and Wrought-Iron Tube Makers.

D. BRUCE PEEBLES,
Gas-Meter Manufacturer,
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BEST AND HOBSON,
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Manufacturers of
CHANDELIERS, PENDANTS, BRACKETS,
Brass and Iron Gas-Fittings, Steam and Water-Cock &c., &c.
Also,
PATENT WELDED IRON TUBES,
For Gas, Steam, Water, and other purposes.
GAS APPARATUS OF EVERY DESCRIPTION.
High-pressure Water-Valves and Cocks, &c., &c.
Plumbers Brassfoundry,
BRASS, COPPER, COMPOSITION, AND LEAD TUBES.
Works: Birmingham, and Great Bridge, Staffordshire.

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68, KING'S ROAD, READING,
Having had many years experience in the adjustment and regulation of the supply of gas to public lamps, begs to offer his services to Gas Companies, Corporations, or Boards of Health, on reasonable terms.
Contracts taken for laying mains, general repairs, and extension of gas-works.

FREDERICK RICHARDS,
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Plans, Specifications, and Estimates made for New or the Alteration of existing Gas-Works.
Gas-Works leased, or Estimates given for the Manufacture of Gas per Contract for a term of years.
Manchester Office: 8, Cateaton Street.

GAS COAL.
MESSRS. RICHARD EVANS & CO., Haydock Collieries, near St. Helen's, are prepared to SUPPLY their best GAS COAL to Gas Companies on favourable terms.
This Coal is extensively used by some of the largest Gas Companies in the Kingdom.
It produces 9,400 cubic feet of 17-candle power, and yields 13 cwt. of coke per ton.

JAMES NEWTON & SONS,
(Established 1820,)
FIRE-BRICK AND TILE MERCHANTS,
Wholesale and for Exportation,
FALCON DOCK, 78 AND 79, BANKSIDE,
SOUTHWARK, LONDON, S.E.,
DEPÔT for STOURBRIDGE AND NEWCASTLE FIRE-BRICKS, LUMPS, TILES, and FIRE-CLAY, and every Article suitable for
GAS AND WATER WORKS.

B. CARPENTER'S Improved Wood SIEVES for Gas-Purifiers.
Works: 14, John Street, Pentonville Road, LONDON, N.
The above sieves are used by the principal gas companies in London and the country. Their utility, durability, and cheapness combined, render them superior to all others.
Testimonials from gas engineers who have tested their qualities forwarded on application.
All orders punctually attended to, and estimates given if required.

MR. G. W. STEVENSON, C.E., F.G.S., (for the last 10 years Engineer to the Corporation of Halifax), may be consulted upon all matters connected with the construction of gas-works, and the manufacture and supply of gas; also upon the construction of water-works and the supply of water to towns; and also in respect to the sewerage of towns, and sanitary works generally.
Offices, Waterhouse Street, HALIFAX, and 14, Park Street, WESTMINSTER.

CATHELS'S Patent Four-Way Disc GAS-VALVES, applied to Purifiers, Gasholders, or other apparatus, save from ONE-HALF to TWO-THIRDS the number of ordinary Valves and Connexions. They are simple, strong, and durable; and having no ground faces or rubbing surfaces, cannot get set fast however long they may remain unmoved. The direction in which the Gas is passing can also be seen at a glance.
Descriptive Circular, Prices, &c., furnished on application to the Manufacturers, Messrs. GUEST and CHRIMES, ROTHERHAM.

J. T. B. PORTER & CO.,
GAS ENGINEERS,
MANUFACTURERS AND CONTRACTORS FOR GAS-WORKS
Of any extent at Home and Abroad,
GOWTS BRIDGE WORKS, LINCOLN,
AND
JOHN STREET, ADELPHI, LONDON, W.C.

SAMUEL CUTLER, Gasholder MAKER and CONTRACTOR
For Tanks, Roofs, Purifiers, Condensers, Erection and Alteration of Works and every description of GAS APPARATUS.
PROVIDENCE IRON WORKS,
MILL WALL, POPLAR, LONDON, E.
Main Laying and Gas-Works erected complete.

WALTER MABON & CO.,
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MANUFACTURERS OF
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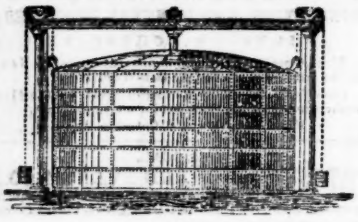
GAS APPARATUS,
PIPES, VALVES, IRON ROOFS,
WROUGHT AND CAST-IRON GIRDERS.
DESIGNS, SPECIFICATIONS, & ESTIMATES FURNISHED.

GAS AND WATER PIPES.

CLARIDGE, NORTH, & CO.,

BILSTON.



IMPROVED GAS APPARATUS,

FOR TOWNS, VILLAGES, &c.

INVENTED AND MANUFACTURED BY

W. C. HOLMES & CO.,

WHITESTONE IRON-WORKS, HUDDERSFIELD.

WILL BE SENT ON APPLICATION:—

PLANS, SPECIFICATIONS, and PRICES of GAS APPARATUS;

PLANS, SPECIFICATIONS, and ESTIMATES of the requisite BUILDINGS for each size of Apparatus;

PLANS of the IMPROVED ANNULAR CONDENSERS;

PLANS of the COMBINED PURIFYING APPARATUS, so eminently adapted for Exportation.

LONDON OFFICES—56, GRACECHURCH STREET, CITY.

*** *Please address letters to the Works at Huddersfield.*

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THE BUSINESS OF

WILLIAM SUGG,

GAS ENGINEER,

is removed to his New Factory,

VINCENT WORKS, VINCENT STREET,

REGENT STREET, WESTMINSTER.

WILLIAM INGHAM AND SONS,

WORTLEY FIRE-BRICK AND RETORT WORKS,

Near

Leeds.

W. INGHAM and SONS, having for many years been extensively engaged in the Manufacture of

RETORTS AND FIRE-BRICKS FROM THE CELEBRATED WORTLEY FIRE-CLAY

beg to call especial attention to their RETORTS, which have for many seasons proved to be unsurpassed in quality by any in the Kingdom, their FREEDOM FROM CRACKS and the ADHESION OF CARBON rendering them worthy the attention of all parties interested in the making of Gas.

The Works are of such magnitude as to ensure the prompt execution of orders to any extent.

Estimates for Setting, or Bricklayers sent when required.

GAS OVENS IN SEGMENTS OF EQUAL QUALITY.

A large stock of Fire-Bricks, Fire-Clay, Terra Cotta, and Drain-Pipes of all sizes kept in London at CHRISTIE & CO.'s Wharf, 64, Bankside, Southwark, where all particulars of Prices, &c., may be obtained.

N.B.—*Export orders continue to have prompt attention.*

KING BROTHERS,

STOURBRIDGE FIRE-BRICK AND RETORT WORKS.

KING BROTHERS beg especially to call the attention of Gas Companies to the superiority of their Retorts, which are made from the celebrated STOURBRIDGE FIRE-CLAY. Mr. King has patented a Kiln for burning Retorts, by which Patent all Cold Air is excluded from the Kiln while burning, thus rendering them FREE FROM CRACKS AND CORRECT IN FORM. By great care in Manufacturing, combined with the advantages in burning, a VERY SMOOTH SURFACE is obtained, rendering them less liable to carbonize.

Retort Ovens, Fire-Bricks, Guards, Saddles, Rabbitted Bars, Flues, and Quarries, are all Manufactured of the same quality of Clay.

Every Retort and Brick is branded "King Brothers, Stourbridge."

TO GAS COMPANIES AND THE TRADE.

NOTICE OF REMOVAL IN CONSEQUENCE OF THE LATE FIRE.

J. DEFRIES AND SONS,

Gas Engineers, and Manufacturers of

CRYSTAL, BRONZED, & ORMOLU Chandeliers;

IMPROVED CRYSTAL STAR & SUN LIGHTS;

VESTIBULES, and every description of Gas-Fittings.

Temporary Show-Rooms:—16 & 17, COMMERCIAL STREET, WHITECHAPEL,

Five Minutes Walk from their late Establishment, 147, HOUNDSDITCH.

J. D. & SONS beg most respectfully to inform Gas Companies and the Trade that their CITY SHOW-ROOMS are now complete with every description of Lighting Mediums, including Registered Designs of Mediæval Gas-Fittings, Crystal, Bronzed, Ormolu, and Electro-Plated Chandeliers, Brackets, Vestibule-Lights, Bronzed and Gilt Statuettes.

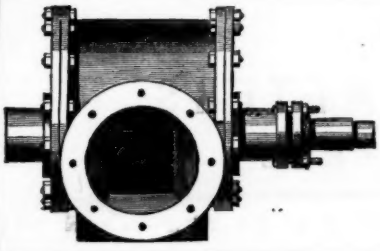
Special Designs prepared in perfect accordance with architectural arrangements. Estimates furnished for the Lighting and Fitting up of Theatres, Music-Halls, and Public or Private Buildings with Gas.

GAS-MOONS of the Newest Designs.

The PATENT GAS-REGULATOR and PURIFIER reduced to **6s. 6d. per dozen.** *Pattern-Books of Gas-Fittings, Crystal and Ormolu Chandeliers for* 1865-66 *are now complete.*

Works: LONDON and BIRMINGHAM.

The CRYSTAL CEILING, with Ventilating Apparatus, manufactured by J. Defries and Sons for the Strand Music-Hall.



ROTATORY AND DOUBLE-ACTING GAS-EXHAUSTERS,

with many recent improvements, from 1500 to 150,000 cubic feet per Hour.

JAMES BURTON, SONS, & WALLER,

MAKERS OF ENGINES, MACHINERY, and IRONWORK for GAS-WORKS,
efficient and durable TAR, LIQUOR, and SYPHON PUMPS,
GAS-VALVES, with or without Wedges, worked with powerful Worm and Rack,
SELF-ACTING BY-PASS VALVES, with Lid and Relieving Lever,
ROTATORY, TUMBLER, and CAPILLARY WATER DISTRIBUTORS for SCRUBBERS.
SMALL-SIZE EXHAUSTERS KEPT IN STOCK.

JOHN'S PLACE, HOLLAND STREET, SOUTHWARK, LONDON, S.E.

GEORGE ANDERSON,

GAS AND CONSULTING ENGINEER.

OFFICES REMOVED TO

19, NORTHUMBERLAND STREET, CHARING CROSS.

Mr. ANDERSON advises Companies on all matters connected with the manufacture of Gas and the construction of Works.

PATENTEE & MANUFACTURER of the following Inventions:—

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